Clinical Lecture
ON
CATARACT.

Delivered at the Eye Infirmary, Newcastle-on-Tyne.

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(*Concluded from p. 437.*)

WE now, gentlemen, come to consider an operation which took the profession by storm, and for many years held its own in almost every clinic in Europe. I allude to Graefe's modified linear extraction. Like everything which originated in the intellect of the illustrious professor of Berlin, it was sure to command the respect and attention of the profession. The enthusiasm with which it was greeted, and the rapidity with which it threw all other operations into the shade, was only equalled by the success which attended his discovery of iridectomy as a means of treating glaucoma. It cannot, however, be said that the former has stood so well as the latter the inevitable test of time and experience. Year by year the various modifications which were made in it told but too inevitably that it was not giving that satisfaction which its first introduction gave promise of. Each operator in succession varied it somewhat, until at last, as De Wecker wittily expressed it, nothing remained of the operation but the knife. With your permission I will more minutely describe this operation, as its various steps may be made the keystone for our future remarks upon cataract operations in general. .....

I wish, gentlemen, to point out what I consider—indeed, what are generally now considered—the disadvantages and dangers of this operation. In the first place, if you have accurately followed my description, it cannot have failed to impress you that it is a tedious and difficult operation. The incision is not easy to make with exactitude, and if extending too far into the sclerotic it gives rise to great dangers. The iridectomy requires great care and skill, and, what to my mind is a great drawback, necessitates an assistant. There is not infrequently a troublesome amount of hæmorrhage from the sclerotic and iris, which obliges the operator to wait for its cessation or continue the further steps of the operation in the dark. The exit of the lens is not always easy. The proximity of the wound to the zonula weakens its support, and there is therefore great danger of loss of vitreous at an early stage, and subsequently in the removal of débris from the anterior chamber. An error at any stage of the operation is difficult to rectify, and sometimes brings about complete failure When all the steps of the operation are successfully completed, the after-progress is certainly more rapid and less complicated. There is no flap to suppurate, and the excised piece of iris precludes in a great measure the dangers of iritis and occlusion of the pupil. On the other hand, an eye which is at all prominent is deformed in appearance. All these are serious defects, and, to my mind, constitute serious drawbacks to the practice of the operation. But there is another which is still more fatal, and that is the frequency with which the operation has been followed by sympathetic ophthalmia. Statistics show that the accident occurs in about 2 per cent. of cases. If the absolute truth could be ascertained, I have little doubt that the percentage would be still higher, but there is naturally a desire to pass over this extremely disagreeable subject.

Weaned from the old flap operation and dissatisfied with the new, ophthalmologists began to look on all sides for some operation which would meet every demand and obviate every danger. Like the search for the philosopher's stone, this effort has been and is likely to be fruitless. No operation can satisfy every demand of facility of execution at the moment and freedom from dangers in the subsequent healing. The principle of linearity, once developed, was by some carried *à outrance*. In conformity with the geometrical necessity that an incision in a spherical body to be truly linear must be in one of its meridians in a direction passing through its centre, Kuchler advised and practised a horizontal section through the centre of the cornea. Strange to say, so inclined are some schools to sacrifice practice to theory, he did not lack supporters, although the results, as must have been foreseen, were attended with most destructive results to the eye as an optical instrument. Further attempts were made with slight modifications in the same direction. Giraud Teulon practised an incision which was linear, but higher than Kuchler's, being transported to the vertical edge of the pupil. Perrin made a short rectangular flap. Notta made his incision in a linear direction, but slightly higher. All these operations, gentlemen, are, I think, undesirable; they are exposed to the fatal objection that in a large proportion of cases they lead to adhesions of the iris to the wound, a condition which is dangerous in the extreme, not unfrequently leading to chronic destructive inflammation of the eye. I have never practised them, and I hope no one does in the present day.

We come now to consider another class of operations. These are typically represented by what is called the Belgian operation. They include Lebrun's, Warlomont's, Liebreich's, and De Wecker's (although I do not here speak of De Wecker's last operation). Though differing in minute details, all these operations have this in common, that they hold a medium position between the old flap and the linear operations. Some approach more nearly to one, some to the other; and in proportion as they do so, speaking generally, they partake in a greater or less degree of the dangers of the type from which they spring. I will now briefly describe these operations. .....

The description I have given of cataract operations brings us to a period very closely approaching the present day, and for years I performed the Belgian operation in most of the cases which presented themselves to me. I found that as regards suppuration of the cornea the danger was much diminished; on the other hand, I found that complications from iritic adhesions were more frequent, and gradually I carried my incision higher. Many other operators experienced the same difficulties, and followed the same plan to obviate them. De Wecker has lately most persistently and energetically advocated the performance of what he calls his "small median flap." He forms a flap of the upper third of the cornea, keeping well within the corneo-scleral junction so as to form a small conjunctival flap, with which the wound is covered or protected after the completion of the operation. What are his real claims to call the operation his own I don't know; many others seem also to have called it theirs. In Juler's book you will see it described as Anderson Critchett's. The operation which I usually perform, and have performed for some years, is a kind of medium between the Belgian and De Wecker's. (See Fig. 11.) The incision commences on a little lower plane and is carried into a little higher plane than Lebrun's, and it does not reach quite so high as De Wecker's. It lies wholly within the cornea, and does not trench upon the sclerotic or produce a conjunctival flap, unless accidentally the incision is carried too high. No iridectomy is performed unless a prolapse at the time of operation cannot be easily and immediately reduced, or sometimes in cases where there is reason to believe much cortical matter remains in the anterior chamber, in which case a small iridectomy is made, as it much facilitates a clearance of the anterior chamber. In a large proportion of cases, as I shall show you after the lecture, a clear central movable pupil is obtained. In those in which an iridectomy has been performed the shape of the pupil will vary with the amount of iris that has been removed. The advantages of this operation are:—1. Its easy performance. 2. It does not require an assistant. 3. In a large proportion of cases it leaves a clear circular pupil like the old flap operation. 4. It is very little liable to suppuration. 5. It is never, in my experience, followed by sympathetic iritis. 6. It rapidly heals, and is a good operation for persons who cannot remain long under treatment. Its disadvantages are that the incision is sometimes a little small, and the delivery of the lens somewhat tedious. (See Fig. 10.) As a result, generally rather more cortical débris is left in the anterior chamber than is desirable, but this may be removed by careful manipulation. And here, gentlemen, to my mind, an important question arises—To what extent should we carry this cleansing process? Ladies who take the longest time

over their toilettes do not always look the best; and in my experience a tedious toilette after a cataract operation sometimes leads to disastrous results. Experience can alone indicate the cases in which it is advisable not to manipulate too much.

The operation I have just described, gentlemen, I certainly consider the most satisfactory; it is a middle course between the Scylla of linearity and the Charybdis of flap extraction, and minimises the danger of each whilst claiming most of their advantages. I am not quite certain that the linear knife is the best for making the corneal section, and I have had a small knife made upon the Wenzel type, but as yet have not had sufficient experience to speak of it confidently. It certainly obviates an accident which, though not of very frequent occurrence or of great import when it happens, is best avoided. I allude to the iris falling against the edge of the knife, and a small piece being cut off on making the section. I think, gentlemen, we have arrived at a period when we cannot expect much better results than those we get. The removal of a cataract must be attended with some risks and some dangers; success cannot always crown our efforts. If statistics are to be relied upon, some operators have reduced their failures to 2 and 3 per cent., or even lower. Though I think in good selected cases such an amount of success is attainable, I do not believe anyone, however dexterous, could obtain such results from a large number of average cases containing immature, hyper-mature, and complicated cases of cataract such as present themselves at every large clinic. I calculate that I cannot have performed much less than 1200 cases of cataract extraction during the last sixteen years in my private and public practice, and of these close upon 1000 will have been cases of senile cataract. If I were able to give them to you in a statistical form I fear I should only bore you, and, further, the time at my disposal and the lack of clinical assistance have prevented me keeping accurate records of them all. Statistics, it has often been said, are only of value to mislead those who consult them. They certainly are only of use to the person through whose hands the cases have passed, and who understands, if I may so put it, the delicacy of their compilation. One hundred cases of cataract in the practice of one person cannot be usefully compared with one hundred in the practice of another. The cases themselves may differ materially. One may select only mature and uncomplicated cases. The patients may be of a different class. A rural and an urban population bear operations very differently. Lastly, though not least, the means of treating patients after the operation may vary infinitely. In my earlier cases I laboured under great disadvantages. Our hospital was small, inconvenient, and destitute of the most ordinary sanitary conditions. The result was that a considerable number of my patients were virtually treated as out-patients. Nevertheless, most of them did extremely well, and the virtue of necessity taught me a lesson which I have subsequently applied with advantage, and that is that in ordinary weather cataract cases should not be too closely confined after the first few days. I think from what I have said you will gather that it is useless to compare statistics of different operators, or even one's own, at different periods. Statistics to be of value should enter into every detail, and should in fact be accompanied by a complete and minute history of each case. The impossibility of doing this without the assistance of a number of clinics is obvious to all, and even with their assistance they could only be partially kept. Many of the cases disappear in a mysterious manner long before they are healed, and though known to be doing well never come back even for suitable glasses. Generally the results of my cases as regards loss of sight or complete failure have been as follows:—In the earlier periods of my career I performed 400 cases of flap extraction, with an average failure of 10 per cent. But, as I before said, my earlier cases were performed under great difficulties. I have now a comfortable and well-appointed hospital both for my private and public patients, with all the latest improvements science can command. My losses when performing the Belgian operation amounted to 7 per cent.; these were chiefly from secondary complications; and my losses in the last 200 cases performed by the method last described, and which for the sake of distinction we may call the "modified flap" or "small flap," has been 5 per cent. Latterly, for my own purposes, I have begun to classify my cataract cases somewhat after the manner in which some insurance companies classify their lives—viz., first class, second class, and third class risks. The first class contains all the cases of mature cataract in healthy persons not over seventy years of age; they are the best selected cases, and in them there should not be a proportion of failures exceeding 2 per cent. The second class contains all cases of immature or hyper-mature cataract, and cases of persons over seventy in whom the iris is sluggish and there is evidence of regressive changes in other structures of the eye than the lens; such cases, though not always easy to describe, are familiar to the practised eye of an ophthalmologist. The third class would contain cases in which distinct complications exist—iritic adhesions, sub-inflammatory conditions of the conjunctiva, blepharitis with slight ectropion, myopia in high degrees, increased tension, and abnormal lowering of sight in proportion to the cataractous condition of the lens. The second class would not have a much larger percentage of total failures than the first class, but would contain a larger proportion of the partially successful cases. The third class would contain by far the larger proportion of total failures, and if an operator, however dexterous, frequently undertook these cases, it would soon increase his percentage of losses.

It is not only in operative measures, gentlemen, that the treatment of cataract has made advance. It was to be expected that the development of the antiseptic system should find some application in ophthalmic surgery, although for a long time it resisted its charms. Wounds of the globe and cornea have a very effective and natural air-tight dressing in the shape of the lids, which keeps the parts in apposition and to a certain extent places any wound in the position of a subcutaneous incision. They are removed in a great measure from the influences which produce traumatic infection, and they usually heal quickly and well; still, suppuration does sometimes happen, with effects that are peculiarly disastrous to the organ of vision, producing irremediable and rapid destruction. To guard against these untoward results some have advocated and practise the strictest antiseptic precautions, including the spray and the full development of Listerian dressings. The greater part, however, content themselves with a modified form of antisepticism, which is certainly attended with beneficial results. The irritability of the mucous membrane of the eye will not tolerate contact with some of the more powerful forms of antiseptics and germicides; but in boracid acid, salicylic acid, weak solutions of corrosive sublimate, and iodoform we have substances which will fulfil all the indications we require. The details, as I carry them out, are as follows: On the morning previous to the operation the patient should twice have his eyes thoroughly bathed with a saturated solution of boracic acid made with boiling water, and slightly coloured with tincture of lavender; or a lotion containing two grains of corrosive sublimate to eight ounces of water. The lotion should have free access to the eye and permeate the inferior and superior cul-de-sac, its last application being immediately before the operation. After the operation the external parts are again cleansed with the same lotion and the closed lids covered with an oval-shaped piece of lint, well smeared with boracic vaseline of the strength of one drachm to one ounce. The hollow of the eye is then filled with cotton wadding and a knitted bandage applied over all. De Wecker, on the completion of the operation, rubs iodoform ointment over the corneal wound with a small spatula. I fancy this is an unnecessary complication; it might, to my mind, produce superficial irritation and hyperæmia, which would prove an initial step towards graver pathological changes. I need not say that the greatest care should be taken that the instruments are thoroughly cleansed, and those which I am about to use are always placed in a small vessel containing the same lotion that has been applied to the eye. These precautions, gentlemen, are certainly quite worthy your attention. They are simple and easy of execution, and they do not require a great deal of time or labour. But there are other points which we must not omit to mention. Persons who suffer from cataract have frequently other complications in the shape of slight congestive conjunctivitis, blepharitis, epiphora, obstruction of the nasal duct, and other things. All these are conditions which militate against a successful issue, and must receive careful attention and appropriate treatment. Do not allow yourselves to be led hurriedly into performing an operation in these cases until matters have been put into the best position possible. A few weeks' careful treatment and observation of such a patient will not be thrown away, and

may convert what would have been a complete failure into a success.

One word on the question of anæsthesia, which time and space forbids my discussing more fully. The introduction of cocaine has practically removed cataract from the class of operations requiring general anæsthesia, and chloroform or ether should be reserved only for cases in which we are called upon to operate upon children or young persons who cannot exert any control over their nervousness, or for those special cases in which it is intended to remove the cataract in its capsule through a large section, or to accompany the operation by an iridectomy.

In conclusion, gentlemen, let me remind you that it is not always the surgeon who is the most brilliant and accomplished operator who can show the largest number of successes, but rather he who studies his cases, looks at them in every aspect, and exerts a personal supervision over every detail of the operation and the subsequent treatment, with a careful eye to eliminate all influences which may exert, directly or indirectly, a baneful effect upon the case. We cannot do better than bear in mind, with regard to the operation, the words which that accomplished writer and thinker Addison applied to life: "If you wish for success, make Perseverance your bosom friend, Experience your wise counsellor, Caution your elder brother, and Hope your guardian genius."

ON COMPRESSION OF THE INNOMINATE ARTERY.

WITH NOTES OF A CASE.[1]

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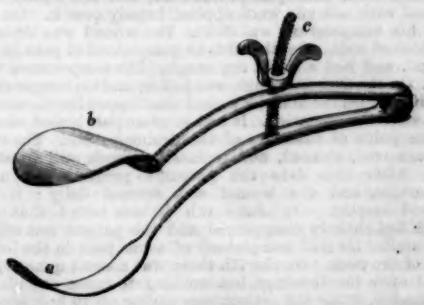
IN this paper I propose to consider:—1. Temporary compression of the innominate artery in connexion with prevention of hæmorrhage in operations or injuries involving its main branches. 2. More permanent compression of this same artery in connexion with the treatment of aneurisms, involving its main branches.

1. It was my good fortune more than twenty years ago to assist the late Mr. Syme in many of his important operations upon aneurysms after the "old" method. In two of these cases the aneurysms involved the axillary artery, were of very large size, filled up the whole axilla, and projected under the clavicle, so as to make compression of the third part of the subclavian artery difficult and uncertain during the operation of laying open the sac. In one of these cases Mr. Syme made a small incision through the skin immediately above the clavicle and parallel to it, so as to allow the finger of an assistant to be passed into the wound, and so compress the subclavian artery more directly until the sac was opened, and the axillary artery secured at the point of communication with it. It occurred to me at the time of this operation that there was a certain amount of risk in opening into the aneurysmal sac or of rupturing it above the clavicle with the finger, an accident which would have much complicated the proceeding; and it further occurred to me that an axillary or subclavian aneurysm might so project into the neck as to make temporary compression of the subclavian artery between the heart and the aneurysm impossible. I accordingly made some dissections on the dead subject and some observations on the living body, and as a result of these I found that temporary and efficient compression of the innominate artery could be accomplished by a very simple proceeding. In order to assist in this compression I had constructed the instrument shown in the accompanying illustration. This instrument has now been in my collection for many years, but it was only quite recently I had an opportunity of using it in the case presently to be described. It consists of two blades (*a b*) united by a hinge joint and separated and approximated by means of a fine screw (*c*); its application will shortly be explained. I advocate the following method of compressing the innominate artery when the circulation in its chief branches cannot otherwise be controlled, as in the case of wounds or operations involving the right subclavian and first part of the right carotid artery. Make an incision in the middle line of the neck about two inches in length over the lower part of the cervical trachea, the same as is usually made for performing low tracheotomy; cut down through the various textures until the trachea is exposed, and it will then be found that the finger or a director can be insinuated by a careful separation of the tissues behind the innominate artery, and this vessel compressed against the sternum or sterno-clavicular articulation, so as to stay all circulation in its branches. This fact I demonstrated upon the living subject in the case appended to this paper. If preferred, the blade *a* of the compressor, protected by a piece of indiarubber tubing, can be gently passed behind the artery in the same way, the blade *b*, protected by an indiarubber pad, being placed outside over the upper part of the sternum. The instrument has been so curved that it lies across the neck obliquely without compressing the trachea. This instrument was also tested upon the case already referred to, and was found to be efficient. The special curve in the lower blade was found to be important in preventing the artery from slipping downwards over its point when compression was made. Although this case ended fatally, the temporary compression with the finger and instrument was not, in my opinion, the cause which led to fatal hæmorrhage, and it is important to note that no chest complication followed the proceeding.

2. Ligature of the innominate artery for the relief of aneurysm, involving the first portions of the right subclavian and right carotid arteries, has proved to be so fatal a proceeding that even with improved animal ligatures and antiseptic precautions surgeons hesitate to practise it. Neither has compression of the innominate artery in these cases given much encouragement. In the cases published



by Bickersteth[2] and Porter,[3] secondary hæmorrhage from the point of the artery compressed proved fatal. In both cases the compressor employed was applied direct to the walls of the artery, and was narrow in form. In Porter's case a kind of double aneurysm needle was used, and in Bickersteth's case wire connected with an ingenious arrangement of elastic bands formed the compressing agent. Having recently endeavoured to carry out compression of the innominate artery in a case of subclavian aneurysm by a method differing from those of Porter and Bickersteth, I record a note of it. I am especially wishful to report the case because the cause of the secondary hæmorrhage which killed the patient was unexpected, and requires careful consideration in connexion with the present and common use of indiarubber drainage-tubes. My proposed method of procedure in this case was: 1. To expose the innominate artery by means of the incision advised, with antiseptic precautions. 2. To insert one end of an indiarubber drainage-tube under the artery, and leave it there in position until the tissues had become accustomed to its presence, and until the risk of a septic condition of the wound was diminished. 3. When the latter conditions had been obtained, to introduce the small blade of the compressor into the drainage-tube, and carry on compression of the artery more or less continuously according to the effect produced.

J. B——, aged fifty-three, was admitted into the Royal Infirmary under my care on May 14th, 1885. His history was that in April, 1884, while lifting a heavy weight, he felt "something give way" at the root of his neck, and he became very faint and remained so all day. In the evening of the same day he noticed a swelling above his right

[1] Read before the Medico-Chirurgical Society of Edinburgh, Feb. 3rd, 1886.

[2] Medico-Chirurgical Transactions, vol. 56.

[3] Dublin Quarterly Journal, vol. 44.

clavicle, which pulsated and slowly increased in size. On admission, an aneurysm of the third and involving a portion of the second part of the subclavian artery was diagnosed. He was treated by rest, careful diet, and the iodide of potassium for about a month, with the result that his symptoms were relieved, but the aneurysm remained in much the same state. He then left the hospital at his own desire, and he promised to return if he became worse. Nothing more was heard of him until he was readmitted in May, 1885. His symptoms had again increased, and he complained much of a dull aching pain over the right side of his chest, and shooting towards his back. The aneurysm was the size of a small orange, and pulsated strongly; a marked bruit was present. The tumour was situated immediately above the centre of the right clavicle, and the pulsation passed down into the axillary artery, which was somewhat dilated. The heart-sounds were normal, except that those over the aortic area were fainter than usual. The radial pulses showed signs of slight atheroma. The other internal organs were healthy. No history of syphilis could be obtained. On May 27th I exposed the innominate artery by the median cervical incision, and readily separated with my finger and a director the tissues, so as to allow the former to pass behind the artery and compress it against the sterno-clavicular articulation. The compressor was then applied, and found also to act in thoroughly staying all circulation in the vessel and its branches. The compressor having been removed, an indiarubber drainage-tube, with a diameter of half an inch, was inserted into the wound and adjusted so that its one extremity lay behind the artery and the other protruded from the external wound. The drainage-tube was secured in position by a piece of silk thread tied round the neck. The operation was performed with the usual antiseptic precautions, and the wound was dressed with salicylic wool applied loosely over it. On the 28th his temperature was 99·4°. The wound was dressed, and looked well. On the 29th he complained of pain in the wound, and had a slight dry cough. His temperature was 102°. On the 30th his cough was better, and his temperature was 101·2°. On the 31st the wound was dressed for the second time since the operation. It had in great part healed, except at the point of insertion of the drainage-tube. The tube was removed, cleaned, and replaced. Cough still troubled him. After this date the patient's progress was most favourable, and the wound was dressed daily; it remained aseptic. On June 6th it was noted that the cough had entirely disappeared and the patient was otherwise well. He still complained of some pain in the lower part of the neck. On the 7th there was a small quantity of blood upon the dressings, but nothing to cause any alarm. On the 8th, while the patient was sitting up in bed, serious arterial hæmmorrhage suddenly took place, which was temporarily checked by passing the finger deeply into the wound and compressing the artery against the sternum. Shortly afterwards I visited him, and finding that the bleeding proceeded from a point in the innominate artery, I prolonged the original incision along the line of the clavicle so as to expose the artery more thoroughly and apply a ligature round it. As I required to keep the finger of one hand upon the bleeding point, I found it impossible to pass a ligature round the vessel between the heart and this finger, although I made several attempts to do so. I then applied the compressor in the way described, and this completely stayed the bleeding. By this time the patient was almost pulseless, and, although no further bleeding took place, he sank and died about five hours after. The post-mortem examination disclosed an aneurysm about the size of a hen's egg involving a small portion of the second and the whole third portion of the subclavian artery. The axillary artery was also dilated, especially in the first part of its course. At a point on the posterior aspect of the innominate artery, and immediately below its bifurcation, there was an oblique slit or ulceration nearly a quarter of an inch in length involving its entire coats; the other portions of the artery and the heart and aorta were in good condition, and did not show any marked traces of atheroma. The ulceration in the coats of the artery exactly corresponded to the point against which the drainage-tube rested, and there were two small spots on the trachea which showed signs of commencing absorption, the result of the pressure of the same tube.

In connexion with this case I would remark, first, upon the cause of the fatal secondary hæmorrhage; and, secondly, upon the future prospects of compression of the innominate artery for the relief of aneurysms on the right side of the neck.

1. The cause of the fatal hæmorrhage was, in my opinion, the ulceration of the coats of the artery owing to the continuous pressure of the drainage-tube. I am not aware that the pressure of a drainage-tube has been thought likely to lead to so serious a result as in the present case, more particularly when the wound in which it lay remained aseptic; but from the experience of this case and of others of which I have quite recently heard, I consider that we must now reckon this risk as possible and avoid any lengthened continuous pressure upon a large bloodvessel by a drainage-tube. It may be said that the manipulation of the artery when the drainage-tube was first introduced may have assisted in destroying or weakening the coats of the artery, but as the artery was in a healthy condition and the manipulations of it were conducted with gentleness, I do not think so, and would attribute the rupture entirely to the results of the pressure of the drainage-tube.

2. Owing, then, to the unexpected accident caused by the drainage-tube, my proposed suggestions for the treatment of this case could not be carried out; nor do I advise that they should in any future case be employed exactly upon the same lines. I do, however, still hope that by some modification of the compression of the innominate we may succeed in relieving aneurysms which admit of no treatment other than the unsatisfactory one of ligaturing this artery. The direction of this modified compression should, I venture to assert, be on the principle of applying, with the assistance of a central cervical incision, digital or instrumental compression to the innominate artery, the patient being under the influence of some anæsthetic. Such compression should not be too continuous, and should be combined with distal ligature or compression, or, if thought advisable, with electrolysis.

THE EARLY TREATMENT OF RHEUMATOID ARTHRITIS.

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(*Concluded from p. 441.*)

THE subject of Treatment is bright or dark according to circumstances—very bright if we have faith in our work, if the disease be in an early stage, and if we will take endless trouble to prevent a small spark from becoming an unmanageable flame. The therapeutics of rheumatoid arthritis is encouraging if we rightly estimate the proportion of general and local treatment, if the social and hygienic surroundings of a patient be favourable, and if we can secure the help of intelligent relatives and sensible nurses. When the nature of a case is clear, and the gravity of the coming evil plainly seen, it is downright treason to hide or to minimise it. Our duty is to be truthful, and at the same time it is a privilege to be hopeful; and in this spirit we shall best undertake what we are going to do.

Local treatment I put without hesitation in the foreground. By this is meant, not that in the long run the local treatment is the more important, but that we ought to begin with it, because time is urgent, and because in this manner we can make the earliest and deepest impression. Here is something wrong (call it what we will) in structures near the surface of the body; it is reasonable, it is almost certain, that we shall first influence this evil tendency by corrective discipline applied closely to the parts affected. It is easy to write with an air of learning about counter-irritation, although we know little about it as a theory; but there can be no doubt of its power as a piece of therapeutic work. Almost alone among recent writers has Dr. Mitchell Bruce advocated the necessity of vigorously striking home on the joints themselves.[1] It is satisfactory to quote a good authority in favour of a practice which I have followed for ten or twelve years. But the laws and limits of counter-irritation must be stringently observed. To put a cantharides blister all over a joint, or to paint the whole exterior of a joint with liniment of iodine, is to commit a grave therapeutic blunder. The antipathies of resentment are stirred in the vaso-motor apparatus under the skin, and the immediate

[1] Quain's Dictionary of Medicine. But it must be admitted that Dr. Bruce's opinions of the pathogeny of rheumatoid arthritis are contrary to established doctrine.

harm overshadows all possible future good. Mr. Furneaux Jordan's rule is plain and wholesome physiology. "Put your irritating agent," he says, "on the circumjacent skin, or, in other words, the neighbouring nerve and vascular territory." The artificial hyperæmia thus created draws away perverted force from the diseased area, and helps to restore an equilibrium. Paint a ring of linimentum iodi around the lower part of a thigh, two fingers' breadth away from a threatening 'rheumatoid' knee; let the ring be one inch and a half wide; renew it every two or three days, according to the coarseness or delicacy of the skin. Paint a similar ring below the knee, renewing it, not at the same time, but alternately with the ring above. If a cantharides blister be applied, let it be always on the cardiac side of a joint; and the blistered surface should be allowed to heal immediately. Another excellent method of counter-irritation is the frequent sponging of the affected joints in the earliest stage with water as hot as can be borne, the calorifacient edge of the heat being blunted by covering a joint with flannel or layers of muslin.

Many are the fine degrees and finer shades of what we call counter-irritation, and the method of using it should be always of the slow and quiet kind. Turpentine and its congeners are incendiary drugs, kindling a rapid fire which can be seldom kept within modest bounds. But there is a more generalised and tranquil method of so-called counter-irritation, which consists of immersing the whole body in hot or tepid water. The Bath thermal waters owe much of their repute to the well-attested faculty of alleviating the medical group of joint disorders, known as rheumatic, gouty, and osteo-arthritic. There is something in natural thermal water which confers upon it unique therapeutic power; for when stripped of the accessories of change of air and scene, of recreation and rest, a residual virtue is discovered which baffles the most searching inquisition. Thermal medicine is a matter of experience and tact; but this point stands out beyond all cavil, that the machinery of thermal bathing is successful in exact proportion to its early use. When proper means have been neglected at the proper time, then that stupid hope which leans upon anything will build castles in the air, and imagine a natural magic in ores, herbs, and waters. From this indolent delay there is often a cruel awakening. But if the regimen of a thermal spa be accepted and obeyed when a rheumatoid arthritis is in its dawn, if the twilight beginnings of a destructive disease are grappled with bit by bit, and hands are joined all round to beat back the foe, we may sometimes win the day when we least expect it, and add laurels to the honourable warfare of medical art.

Douching and shampooing are therapeutic kinsfolk to bathing, and (as a rule) all should go together. "Wet douching" is preferable when joints are sensitive and muscular action is attended by labour and pain. But for rousing structures out of drowsiness, and for stimulating them when afflicted with vital apathy, few agencies are so useful as "dry" hot and warm douches (the body being out of water). The thermal arrangements in Bath have been lately much improved; and a room has been attached to the "Queen's Baths," in which all the best appliances of Aix-les-Bains can be enjoyed, with foreign *doucheurs* and *doucheuses*. Shampooing is a technical mystery which cannot be too highly praised. The younger the patient who is menaced with rheumatoid arthritis, the more important does it seem to carry out stroking (*effleurage*) of the joints and tender kneading (*petrissage*) of the neighbouring muscles. The limbs should be always in the least constrained posture, and the application of bandages and laced supports will test the surgical instinct of the "wise physician." It cannot be said that the external use of drugs does any good; but I have been long accustomed to order the mild inunction every night of the iodide of potassium and soap liniment.

Climate is an element of soothing and healing value. To avoid the English winter and spring sounds disloyal; but to those who can afford it the sacrifice is imperative, and aliens they must be for six or seven months in the year. Between November and May residence should be taken up on the Mediterranean sea-coast, or part of the time may be spend in a sub-tropical sea voyage. This may need to be repeated every year for several years before complete success is obtained. Rheumatoid arthritis is a disease *par excellence* of the north temperate zone. But as the vast majority of people can only dream of the Mediterranean and the luxuries of Algiers and Egypt, they must learn to do the best for themselves in their own country, and to live in a dry and not too cold part of England; out of the "search of the glacier wind," says Mr. Ruskin, and as much as possible in the "rays of the rare sunshine." Internal medicines capable of doing good may be divided into two classes:—(*a*) Those of unquestioned efficacy, because of their obvious physiological appropriateness; and (*b*) those of secondary utility, but helpful according to their mode and measure of administration. In the front rank of the first class stands cod-liver oil, food and physic together; if begun in small quantities with pancreatine or orange wine, it may be pushed discreetly until half a pint is consumed every week. This must be continued for months, perhaps for years, omitting the middle of the summer; and it is a merciful plan to allow a holiday from all drugs once a fortnight. Citrate of iron (five or six grains) and iodide of sodium (two or three grains) may be dissolved and given together in chloroform-water once a day. Among our pharmaceutical resources of lesser importance are strychnia, arsenic, and syrup of the iodide of iron. When arsenic agrees, it may rise to the dignity of a valuable medicine, and there is no reason why it may not be given with the iron and cod-liver oil. Syrup of iodide of iron has been extolled by several writers, and is certainly a model of quiet harmlessness.

Countless hygienic rules may be laid down, and it will be a happy chance if our patient obeys half of them. Rooms well ventilated night and day; the steady morning and afternoon trudge out of doors, to keep muscles and joints from stagnation, and to promote the "metabolism" of effete stuff from the body; plenty of sun and sea; clothing adapted to the ever-shifting stress of weather; and meals of varied and well-cooked food. And if the mind and the affections be rightly guided what more can we do? In short, what we call the prophylaxis of cerebral and pulmonary consumption is the most rational way of warding off the diathetic state which leads to rheumatoid arthritis. The victories of preventive medicine have only begun to be unfolded.[2] When the hands and feet are the members first attacked, and the fingers are early disabled by pain and swelling in the smaller joints, the regular application of galvanic electricity may be tried. I cannot say much in its praise, and the therapeutic uncertainty of electricity has now become almost a proverb.[3]

From an abundance of clinical material I select a case which is interesting, because it shows what can be done when there is a determination all round to do the very best. In April, 1881, Sir Andrew Clark kindly entrusted to my care a young lady, aged seventeen, the daughter of a gentleman (a most munificent churchman) residing in the north of England. During 1879 she suffered much from chronic ulceration of the throat, and was obliged to leave school in March, 1880, "weak, white, and tired." The hands began to swell, and then the feet; many spas were visited during this summer for the benefit of her health; but in February, 1881 (after a severe winter), she became gradually worse, and pain and stiffness began to be felt in the left thigh and both shoulders. When she came to Bath she had great difficulty in raising herself from a chair, and walked with a stoop forwards; the muscles of the limbs were flabby from want of use; but there was no emaciation, and her manner and general tone were full of sprightliness and animation. The medical history of the family was good, with a marked exemption from rheumatic troubles. Many details are omitted for the sake of brevity; and it will suffice to say that a course of six weeks' thermal bathing here, followed by a similar period of perfect rest at Buxton, seemed to give the first impulse to that convalescence which was all the more firm and real because it was spread over several years. Every winter and early spring were spent at San Remo or at Cannes; sometimes there was a short visit to Aix-les-Bains; and four or five of the summer and autumn months were spent in England. Skillful shampooing was constantly used, and cod-liver oil was taken with as much regularity as possible. I heard from my patient once or twice every year; and in the last

[2] Horace tells Mæcenas that if he would live sound and in perfect health, the same indulgence which was granted to him when ill must be granted when he was afraid of being ill:—

"Si me vivere vis sanum rectèque valentem,
Quam mihi das ægro, dabis ægrotare timenti,
Mæcenas, veniam."—EPIST., lib. I., 7.

[3] In a paper read (June, 1880) to a Yorkshire branch of the British Medical Association by Dr. Little of Ben Rhydding, three cases are related of successful treatment by electricity, shampooing, and Russian baths. In the early stage of rheumatoid arthritis, however, Turkish baths and chamber vapour baths only weaken the patient without arresting the disease.

letter (from Cannes, dated Dec. 22nd, 1884) she says: "I have been so well this year. I am much stronger and better this year than last; I can walk much quicker, and have much more use of my hands. My weight also has largely increased." Now this patient might have been easily given up as hopeless; nor would there have been any ground for hope if she had been one of the crowd of those sufferers who are exposed to the chances of weather and poverty and mental depression. In these the little store of nerve force is exhausted by the physiological maintenance of common life. There is no reserve, no hidden power equal to the fervour and passion of driving out of the system a retrogressive change. There may be an amelioration of health, but the "supple government" of the joints can never be renewed.

In divers ways I have now endeavoured to show the "grief and gravity" of a terrible disease; to be a friendly monitor of its sure ending if unchecked, and to give a hopeful tone to our prognosis when opportune events put us in command of the whole line of treatment. In few diseases is time so irrevocable. Our pity should be aroused when beholding the monumental effigies of once bright and active men and women, now laid on sofas or Ilkley couches, and dependent for the humblest office on the ministry of others. The Laureate cheerily sings—

> "Oh! well for him whose will is strong,
> He suffers, but he will not suffer long."

But our dirge is of those who are doomed to suffer long, notwithstanding the comfort of a "strong will" and a supernatural grace. The corporate conscience of the whole profession ought to be stirred in this matter, for it is a reproach to medical art if any curable disease be let run into an incurable form. Dynamic disturbances, which may be easily plucked out in the early blossom, become anarchic and rebellious in their time of fruit. To wait for "specific" remedies or to trust to random discoveries is idle play and not scientific medicine. I venture to express the opinion that the proper treatment of rheumatoid arthritis consists in seizing the right threads at the very beginning, and in holding them with a fighting purpose to the very end. And it will be a natural conclusion to my argument if I suggest that the means be always precisely adapted to our aims, measuring the one with the other under the varying circumstances of race, sex, temperament, and age.

Bath.

SPASTIC PARALYSIS.[1]

BY A. HUGHES BENNETT, M.D., F.R.C.P.

MR. PRESIDENT,—At your invitation I attempt to bring before the Society a subject of great importance. It concerns a morbid state of widely-spread occurrence, and one which must therefore frequently come under the notice of every medical man. It is, notwithstanding, a condition very obscure in nature, causation, prognosis, and treatment. In consenting to open a conference on spastic paralysis, I do not anticipate that the darkness which surrounds the question will be illuminated by any original revelations of my own. I am, however, encouraged to venture the undertaking by the belief that directing attention to the leading problems to be solved will, without effort on my part, supply a text which the learned may expound, and thus initiate a discussion which may prove of scientific and practical value.

Spastic or spasmodic paralysis is the name which has been given by Professors Erb and Charcot, not to a disease, but to a group of symptoms—to a clinical picture—which must be familiar to everyone. It essentially consists of a morbid condition in which motor weakness, exaggeration of the tendon phenomena, and rigidity of muscles are the prominent and characteristic features. Owing to the existence of these physical states the patient afflicted suffers from certain symptoms which as a consequence ensue—namely, deficient voluntary activity, tremors, peculiarities in gait, and distortions of the limbs. This combination of circumstances is, moreover, not of necessity associated with any interference with the general health or the functions of the body, and the intellectual, sensory, and nutritive organs may be preserved intact. In short, this train of abnormal symptoms, to which the term "spastic" has been applied (owing to muscular spasm being the leading feature of the disorder), is strictly confined to the motor elements of the nervous system.

The *distribution* of this spastic condition varies. It may be confined to a single limb, it may assume a hemiplegic or a paraplegic form, or it may involve all four extremities and every district of the body. As regards *causation*, it may be associated with degeneration of the lateral columns of the cord, secondary to disease of the brain or pyramidal tract, as in cerebral hæmorrhage, myelitis, &c.; or the lesion may be of primary origin in the same regions, thus constituting a disease *per se*, as in so-called primary lateral sclerosis. Also it is met with as a functional disorder from unknown causes, as in hysteria; and it may be the result of certain definite blood-poisons, such as strychnia and lathyrus cicera. Further, as to *pathology*, it is frequently accompanied with demonstrable structural alteration in the nervous system, which appears to be its direct cause, and as often all traces of discoverable tissue change are absent. Again, the *progress* of the disorder is not uniform: at one time it invades rapidly, is acute, and of short duration; and at another is insidious in origin, chronic, and of long persistence. Finally, its *termination* varies, in some instances the disease being hopelessly and permanently incurable, while in others the patient rapidly and completely recovers. This varied distribution, origin, pathology, progress, and termination of the same group of symptoms furnishes a mystery to unravel, and serves to show how perplexing are the difficulties of the subject under notice.

Various theories have been propounded to explain the occurrence of spastic paralysis, the essential features of which, it may be repeated, are motor weakness, exaggeration of the tendon phenomena, and muscular rigidity. Professor Charcot maintains that the symptoms are due to irritation of the ganglion cells of the grey matter of the cord by degenerated contiguous fibres of the lateral columns. It is now well known that a destructive lesion of the motor cortical area in the cerebral hemispheres, or in any portion of the pyramidal tract, induces secondary degeneration of the efferent fibres below, which are thus cut off from the trophic influences of the cells in the grey matter of the brain. This sclerosis extends downwards as far as the multipolar ganglia in the anterior cornua of the cord, and the hypothesis suggested is that the morbid process on reaching the cells causes their irritation, and as a consequence the phenomena of spastic paralysis. That this theory is plausible cannot be denied, and it is possible that it may be a factor in the production of the clinical symptoms in question. It is at best, however, only an imperfect explanation, and not the essential cause, as spastic paralysis may exist in its most typical form when no degeneration of nerve fibres can be demonstrated, as in various functional complaints such as hysteria. Moreover, it may occur under circumstances where it is impossible to conceive the presence of any such permanent or gross structural alteration, as in strychnine poisoning or during the hypnotic state.

Another theory, and perhaps the most popular, asserts that the symptoms of spastic paralysis are due to the simple severance of the spinal from the cerebral centres. In this way it is supposed the inhibitory action of the higher is removed from the lower ganglia. These last are, as it were, thus permitted, from want of control, to run riot, and as a consequence to manifest hyper-excitability of reflex acts, in the shape of increased tendon phenomena and muscular rigidity. It is admitted that during the absence of brain influences the reflex excitability of the cord is augmented, but the train of symptoms included under the term spastic are not produced. Moreover, in sudden destructive lesions of the brain, such as hæmorrhage into the pyramidal tract, although spastic symptoms subsequently ensue, they do not appear until a considerable period of time has elapsed. Now, if simple inhibition were the sole cause of the phenomena, we should expect the effects to be most marked at the moment of interruption, and not gradually acquired, as is the case.

A third theory, which is a modification of the last, maintains that when cerebral influences are suppressed the uncontrolled action of the cerebellum as a stimulator of muscular tonus becomes prominent, and hence the stiffness which takes place. The same arguments which can be

[1] An introduction to a discussion on the subject at the Medical Society of London, March 1st, 1886.

urged against the last hypothesis seem to me to equally hold good against this. A further proof of its inability to account for the position is, that when the cord is completely divided, as in transverse myelitis, spastic symptoms subsequently ensue, although all communication between the cerebellum and cord has been severed.

Such are the leading theories which have been advanced to explain the phenomena of spastic paralysis, as well as some of the reasons to show that no one of them by itself is adequate to account for their production. While it is not difficult thus to take a negative view of the position and criticise existing doctrines, it is not so easy to successfully assume a positive and constructive attitude, and to replace received opinions by others more worthy of acceptance. In attempting to frame a hypothesis which will harmonise with all the facts of the case, it seems to me that the entire question must be viewed from a more comprehensive standpoint than heretofore. The present tendency of neurological science is towards specialisation, and doubtless the great advances it has made of late years is mainly due to success in that direction. At the same time, in order that the accumulation of isolated facts may be utilised to the fullest extent, the laborious process of individual inquiry must be supplemented by generalisation. In the disorder under consideration, as well as in many other morbid states, by taking a more extended view of the situation, it may be found that the supposed classical lesion of a disease is only one factor in its etiology; that, indeed, it may be a result rather than a cause, and that a variety of circumstances from different directions may all equally tend to produce the same effects. Looking, then, at the clinical picture of spastic paralysis, as it were, from a distance, and taking into consideration the manifold conditions of its causation, progress, and morbid anatomy, the following conclusions seem to me to be those which best accord with known facts.

From whatever source the disorder may arise, the symptoms are essentially the same, varying only in distribution and degree. The characteristic motor weakness, the exaggerated tendon reflexes, and the muscular rigidity belong to the same series of phenomena, and have the same physiological signification. The common factor in the production of this series of conditions is an abnormally increased irritability of the motor ganglion cells in the anterior cornua of the cord. Physiological knowledge has taught us that one of the functions of these centres is to maintain a certain degree of permanent tonus of muscular fibre. For this purpose integrity of the reflex arc is necessary. Hence if either the ganglion itself, or its afferent or efferent elements are destroyed, the muscle relaxes, and its response to mechanical percussion (in other words, its tendon phenomenon) is lost. If, on the other hand, the ganglion is from any cause in a state of hyper-excitability, the opposite conditions ensue—namely, hyper-tonicity or rigidity of muscle and spastic symptoms. The order and extent in which the different symptoms appear to develop seem to bear some relation to the amount of excitability of the cells; hence the first manifestation of their irritable weakness is motor paresis, and then in order appear, according to its degree of severity, increased tendon reflexes, clonic spasms, muscular rigidity, and permanent contracture.

If, then, a morbid irritability of motor ganglia is the common property of all forms of spastic paralysis, we have next to determine how this in turn is produced. I believe that this is not to be found in any single explanation, but that a variety of circumstances may act as exciting agents. These circumstances may be mainly divided into three categories: (1) Primary irritation of the ganglion cells themselves; (2) their irritation through the afferent and efferent paths from below; and (3) their irritation through the pyramidal tract from above.

The ganglion cells may be primarily affected in many ways. Strychnia and other poisons, for example, may directly derange their nutrition and produce temporary spastic symptoms. Changes in the quality of the blood, such as anæmia, fevers, &c., may in a lesser degree be followed by the same results, and it is common in such circumstances to meet with muscular weakness, increased tendon phenomena, and a tendency to cramp and stiffness of muscle. The same irritable weakness is found in most exhausting ailments, such as phthisis and convalescence from acute diseases, in which the grey matter of the cord participates with the other tissues of the body in an abnormal readiness to respond on stimulation. It is still further developed in those states of nervous instability characterised as neurotic, such as hysteria, in which spastic symptoms often reach a very high degree.

In addition to direct irritation of the ganglion cells themselves, these elements may be influenced by irritation from below. The well-known observations of Brown-Séquard demonstrated that injury to afferent fibres may cause so-called spinal epilepsy—in other words, extreme hyper-excitability of the grey matter of the cord. Again, Dr. Weir Mitchell, and my colleague, Dr. Donkin, have advanced clinical reasons to show that over-stimulation of the efferent tracts may produce the same results. Such evidence tends to indicate that peripheral irritation of both afferent and efferent fibres may alike lead to hyper-activity of the ganglia to which they are attached.

Influences from above may in like manner be followed by similar results. Experimental irritation of the motor cortical area induces muscular spasm. In disease the same occurs. It has been observed that during an epileptiform attack—that is, during a period of cortical irritation—there is both contraction of muscle and exaggeration of the tendon phenomena, showing that the excitement of nerve tissue has extended to the cord. Even after voluntary motion has been abolished, owing to the temporary exhaustion which follows an explosion of the cortical motor centres, the exalted functional activity of the lower ganglia may remain, and consequently the spastic symptoms may continue. In a short time, however, when the secondary irritation of the cord subsides, the symptoms disappear. In like manner, irritation from inflammation or otherwise in any portion of the pyramidal tract may be followed by similar results, and if the cause be chronic the symptoms may be permanent.

Again, it has been found that not only an irritative lesion, but destruction of the cortical motor area subsequently, but not immediately, leads to muscular hyper-tonicity. The same takes place from disease of any part of the pyramidal tract by which the distal portion is separated from the cerebral trophic elements. This may possibly be due to direct irritation caused by the secondary descending sclerosis, as suggested by Charcot. But prior to demonstrable degenerative change in the lateral columns there are evidences of motor instability, as a few hours after an apoplexy exaggerated tendon phenomena gradually develop. It is therefore obvious that nutrition changes, as a result of removal of cerebral trophic influences, must exist in the motor tract before structural alteration can be apppreciated. The nature of this change, whether vascular, molecular, or dynamic, we do not know, but that it is sufficient to produce objective functional symptomatic disorder is certain. A plausible explanation of this fact would be that anæmia or other nutritive modification of the pyramidal tract was the almost immediate consequence of the disorganised trophic centres above, and that this change in the circulation or molecular stability led to irritable weakness of the adjacent grey matter of the cord. The same effects might supervene upon conditions other than those of actual gross cortical disease, as when the higher nervous elements, without demonstrable anatomical change, are functionally disordered. In such a case the actions of the parts below which are dependent for their constancy on healthy influences from above, would be deranged. Thus from functional irritability or depression of the cerebral cortex there might arise instability of the pyramidal tracts and the motor apparatus connected with them, and, as a consequence, a train of typical spastic symptoms. Such excitants would be all the more potent in a predisposed subject in whom the spinal ganglion cells were already in an abnormally exalted condition, as in such the slightest physical injury readily provokes muscular spasm. Under the same or similar conditions it is but a step further to realise that psychical influences may act as exciting agents for the production of like results. Thus, misdirected volition, emotion, or imagination acting as afferent stimuli might be the originators of abnormal motor phenomena, even when the nervous system itself is in other respects healthy. Again, even normal mental impulses may cause undue motorial demonstrations if the spinal centres are hyper-excitable, as is seen in strychnine poisoning, hysteria, &c. It is therefore obvious that if both these abnormal conditions exist together—that is, increased power of the higher centres to receive or originate mental impressions, and augmented capacity of the lower centres to respond to psychical stimuli—the effects will be the more violent in degree and permanent in duration, and serves to explain the severity

and intractability of many functional disorders. It also gives an explanation of the fact that under these circumstances the physical motor symptoms are sometimes such as could not voluntarily be produced in health, as instanced by the phenomena of hypnotism and hysterical malingering.

In connexion with these reflexions it is a question of the greatest practical importance to know whether repeated and permanent functional over-activity or depression can lead to demonstrable structural changes in the tissues affected. *A priori* reasoning would favour such a hypothesis, although there is not a sufficient series of recorded facts to demonstrate it. At present brevity compels me to forego speculation on this interesting subject. Everything, however, seems to indicate that the causes which lead to hyper-excitability of the ganglion motor cells, and consequently to the production of spastic paralysis, are of an active or irritating rather than of a passive or inhibitory nature. This is supported by many facts; among others, that when one side of the body is primarily affected, there is invariably a tendency for the other gradually to become involved; also, that all circumstances which allay irritability, such as rest, sleep, tranquillity, and sedatives, relieve the symptoms, while the reverse conditions of emotion, exertion, injury, and stimulants augment them.

To sum up, it is suggested that spastic symptoms, from whatever cause arising, are essentially due to abnormal functional hyper-excitability of the motor ganglion cells of the anterior cornua of the cord. The hyper-excitability may for various reasons be inherent in the cells themselves, or may be induced therein by influences emanating from the brain, the cord, or the peripheral nerves. These influences are probably of an irritating nature. The irritation, when it exists in the pyramidal tract, may be excited there either directly by organic disease or functional excitement, or indirectly by changes in its nutrition as a result of severance from its trophic centres. These changes in nutrition may be either gross or dynamic. The gross changes usually follow gross disease of the cortical centres, while the dynamic changes may either follow their structural alterations or their functional disorder. Finally, this functional disorder of the motor tract may have its origin in psychical as well as in physical activity. These theoretical considerations concerning the pathology of spastic paralysis, like other hypotheses, are open to criticism. I admit they are somewhat involved, but this is scarcely to be avoided in attempting to account for the complicated circumstances connected with this group of symptoms.

If, gentlemen, the doctrinal speculations on the subject we are discussing are uncertain, the practical difficulties met with at the bedside are none the less perplexing. As their clinical features are now well recognised, I pass over those forms of spastic paralysis associated on the one hand with secondary changes from gross disease of the nerve centres, and on the other with obvious functional disorder. I limit myself to directing attention to a condition in connexion with this subject, which has always seemed to me most obscure, and which I cannot find anywhere accurately differentiated or satisfactorily explained. It is a group of symptoms which everyone must have met with, and of which there are in the other room several illustrative examples. In my own limited experience it is of frequent occurrence; and I find in my note-books of the last two or three years the detailed account of twenty-four typical examples. An individual, either male or female, in otherwise good health, without obvious cause, gradually experiences slight weakness in a limb—say, the leg. This, as a rule, very insidiously increases, and, after a year or more, extends to the arm of the same side, sometimes to the opposite leg, and subsequently to all the extremities. On examination motor weakness is detected without incoördination; there are clumsy and feeble actions of the upper, and a weak, shuffling, stiff, gait with the lower, extremities. At an early stage there is great exaggeration of the tendon phenomena, the cutaneous reflexes remaining normal. Afterwards ankle-clonus is developed, and later slight stiffness of the muscles and trepidation of the limbs. The general health remains robust, and all the organs and functions of the body are normal. Sensibility and nutrition continue unimpaired. Occasionally, but very rarely, in my experience this abnormal condition is acute, and reaches its full development with great rapidity. The affection may entirely recover, but as often it persists for many years without change, or slowly increases in severity. The disorder is one evidently limited to the motor apparatus. It imperfectly answers to the description of the "primary lateral sclerosis" of Erb and Charcot, but differs from that disease, inasmuch as it is of common occurrence, it frequently recovers, and also because spasm of muscle with its consequences is not the leading feature of the affection. It is a condition which, when occurring in women, is almost invariably pronounced to be hysterical; when in men, it is vaguely called paraplegia or myelitis. For convenience I describe the group of symptoms under the term "hyper-tonic paresis," a symptomatic nomenclature which commits to no theory. This in every respect answers to the hypothesis I have already advanced concerning the nature of spastic paralysis.

In conclusion, I venture to suggest the following points for discussion:—1. Is the organic degeneration of the lateral columns of the cord, so frequently associated with spastic symptoms, essential for their production; or may they be accounted for by functional derangement of the same regions, or of the psychical or motor centres? 2. Whether organic or functional, is the primary seat of disease in the cells of the brain or cord, or in the conducting fibres, central or peripheral? Are the symptoms the result of irritation or inhibition? 3. May primary functional disorder eventually lead to secondary organic degeneration? 4. Regarding the cases described under the term hypertonic paresis. What is the anatomical substratum of the affection? Where and in what manner does it originate? Is the condition one of organic or functional disease, and by what clinical criterion is the point to be determined during the life of the patient? What is the cause, prognosis, and treatment of the disorder?

A CASE OF RUPTURE OF THE KIDNEY.

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THE following interesting case is, I think, on account of its comparative rarity worthy of record.

On April 10th, 1885, I was called to see S. G——, aged thirteen, a collier, who it was stated had been severely injured by a fall of coal while at work in one of the company's pits. I found him lying on his back with the shoulders raised up, thighs flexed (especially the right one), face pale and of anxious appearance, surface cold and bathed in sweat, pulse rapid and feeble, and respiration shallow and of intercostal type, there being but slight diaphragmatic movement. A deep breath caused intense pain in the right lumbar region. He had vomited several times, and was, in fact, in a state of collapse. On examination I found an extensive contusion in the right lumbar region, and slight abrasion of skin over the eleventh and twelfth ribs. The patient complained of such intense pain on pressure that I was unable to ascertain if any ribs were fractured. There was also a slight contusion on the right shoulder, another in the hypogastrium, and another on the posterior aspect of the right thigh. There was no tenderness on pressure in the hypogastrium. In the evening he passed a large quantity of bright arterial blood, mixed with urine, and vomited several times.

April 11th.—11.30 A.M.: Very weak and anæmic. Pulse hardly perceptible at the wrist. Had vomited constantly during the night, and had passed urine tinged with blood. Some fulness in the right iliac region, with dulness on percussion. Complained of great pain all over the right half of the abdomen, and tenderness on pressure.

12th.—Yesterday, about 9 P.M., he passed some urine slightly tinged with blood. To-day he has voided nothing from the bladder. There has been no vomiting. Complained of pain all over the abdomen. Thighs strongly flexed on abdomen, and abdominal walls rigid. Died in the night from a combination of anæmia and shock, having lived sixty hours since the accident.

Necropsy.—I made a post-mortem examination in conjunction with Dr. Coates (chief surgeon to the works) and Dr. Henderson (senior assistant-surgeon, Tredegar Iron Works). Body short for the age, and thin. The right side of the abdomen showed extensive bruising. On opening the abdomen we found a large quantity of blood in the peritoneal cavity. No injury to the diaphragm or liver and no fracture of any ribs could be detected. There was no

apparent injury to the intestines, but portions of the ileum in the neighbourhood of the kidney showed commencing peritonitis. The right kidney was displaced downwards and forwards, and lay in the iliac fossa; behind it was an enormous amount of blood-clots and effused blood, the latter extending along the cellular tissue almost to the middle line of the abdomen in front. There was also a quantity of blood-clots immediately in front of and on the right side of the lumbar vertebræ, overlying the solar plexus and semilunar ganglion; this had apparently spread along the renal plexus of vessels; it did not extend over to the left side of the vertebræ. The peritoneum anterior to the kidney was severely lacerated, and so allowed escape of blood into its cavity. The upper half of the kidney was literally smashed into a pulp, but more so on the anterior surface than the posterior, extending down to the pelvis of the kidney. There were several large branches of the renal artery laid open. We could detect no wound of the trunk artery or vein. There was also a small deep jagged wound in the lower half of the kidney on the posterior surface, which looked as if a rough object had been driven into it. The ureter appeared to be completely blocked by a blood-clot. Bladder empty and healthy; left kidney and ureter healthy. There was no evidence of the lower ribs having been driven through the abdominal walls.

Remarks.—The noteworthy feature of this case is how such an extensive injury to the kidney should have been caused without fracture of any ribs. The sudden cessation of hæmaturia was apparently due to clots in the ureter. The rapidly-increasing anæmia, together with the hæmaturia and fulness of the iliac region, pointed presumably to hæmorrhage from the kidney; accordingly, astringents were given. Mr. H. A. Reeves, F.R.C.S., in a case published by him in THE LANCET of Oct. 4th, 1884, says that as soon as it is found that hæmorrhage is not controllable after trial of every known means, a lumbar incision should be made over the kidney, and all clots and blood removed, and the kidney also, if necessary. It occurred to me, if it would have been justifiable to cut down and remove the kidney as soon as it became evident that hæmorrhage was profuse, obviously in such cases to wait the effect of a lengthy trial of astringents means waiting till too late. I do not feel competent to give an opinion as to the actual cause of this injury; but remembering the fact that the boy was crushed beneath a great mass of coal, it occurred to me that the kidney may have been suddenly dislocated, as it were, by the force of the blow, and at the same time caught between the vertebræ and the suddenly compressed ribs; and what makes this idea more tenable is the fact that the boy was small and very thin for his age, and that the anterior portion of the kidney was the most severely damaged.

Kettering.

ON A

FATAL CASE OF ACUTE DELIRIOUS MANIA COMPLICATED WITH PAROTITIS.

BY JAMES M. WILLIAMSON, M.D. EDIN.,
HONORARY SURGEON TO THE ROYAL NATIONAL HOSPITAL FOR CONSUMPTION, VENTNOR, ETC.

THE patient in this case was an American lady, aged forty, but looking older. She was a highly educated and talented woman, and was the principal of a large educational establishment. Overwork had brought on nervous prostration and insomnia, for which Dr. Hammond, of New York, ordered rest from work and change of scene. For twelve months the patient followed this advice, travelling in England, but without much benefit. During April, 1885, while at Bournemouth, she had a throat attack, suspected to have been diphtheritic, and accompanied by what she called "delirium." The patient came to Ventnor early in the next month (May), and consulted me on the 10th for insomnia. Her catamenia, regular as yet, began on the 12th, and brought on increased restlessness and irritability, upon which chloral and the bromides made no impression. On the 14th she was in bed, her mind excited and wandering. The pulse was rapid, but the temperature not elevated. The tongue was dry; the breath offensive; appetite absent; but the bowels were not confined, and the urine was freely voided. In two days more she was deliriously insane, howling, laughing, incessantly talking, struggling, and trying to bite. She spat out food and saliva, and urine and fæces were passed into the bed, which had been made up on the floor. Morphia, given hypodermically, increased the excitement; but chloral—administered with much difficulty—somewhat lessened it. On the 21st she was seen with me by Dr. Blandford of London, who confirmed the diagnosis. As the heart had begun to intermit, the chloral was abandoned, and paraldehyde ordered instead. The food was limited to eggs and milk. From this time slight improvement took place until the 24th, when swelling of the left parotid gland was observed. The swelling had taken place rapidly during the night, and extended to the malar bone and behind the angle of the jaw; it was hard and very tender, but free from redness. Two days afterwards the right parotid took on the same action, giving the patient the characteristic aspect of mumps. During gleams of consciousness much complaint was made of pain, and attempts at swallowing were virtually abandoned. Feeding by the nares was impracticable, whilst hæmorrhoids that bled copiously at every touch precluded the use of nutrient enemata. No suppuration took place in the parotids, but from this time the strength swiftly declined. Exhaustion passed into coma, and death took place on the 29th, which was the sixteenth day of the illness.

Remarks.—It is to the occurrence of the parotitis in this case that attention is drawn, and it is worth noting because it really turned the balance against the patient at the critical point in her illness. Without referring to the difficulties it threw in the way of treatment, the question of causation is full of interest. It was clearly not a case of idiopathic parotitis. Anyone who had for the first time seen the patient when both parotids were swollen would assuredly have thought of mumps and meningitis; but even had there been no history the delirium could not have been mistaken for that of meningitis. The condition was symptomatic, and not idiopathic. A great deal is heard now of the sympathy between the parotids and affections of the generative organs; in this case, however, although the approaching menopause may have had some share in inducing the maniacal attack, so far as could be ascertained there was nothing wrong with the external or internal organs of generation, or with the mammæ. The case ranks with those similar affections of the parotid which have long been known to occur towards the termination of fevers. Some have held that in these circumstances the parotitis results from a spread of the specific poison of the fever. Since the condition has been seen in pneumonia, however, others have ascribed it to the extension of oral inflammation. The present instance confirms the latter view. The mucous membrane of the mouth was dry and parched and covered with dead epithelium; possibly the milk that was retained in the mouth helped to increase the oral inflammation; but no aphthæ were seen. The incessant action of the jaw and the retention of saliva in the parotid may have been contributing agents. So far as I can gather, this parotid complication, well-known in some severe diseases, does not appear to have been much recognised in connexion with acute delirious mania.

Ventnor, Isle of Wight.

ON SOME OF THE PROPOSED CHANGES IN THE LUNACY ACTS.

BY JAMES ADAM, M.D.,
RESIDENT PHYSICIAN, &C., WEST MALLING ASYLUM; LATE MEDICAL SUPERINTENDENT, CRICHTON ROYAL INSTITUTION, SOUTHERN COUNTIES ASYLUM, AND CATERHAM ASYLUM, SURREY.

THE measure introduced by Lord Selborne is already familiarly known to the public and the medical profession. It was presented to the House of Lords during the last session of the last Parliament, and was ordered to be printed on March 26th, 1885. It met with by no means unanimous approval, and some of its provisions were so much objected to that they led to the resignation of Lord Shaftesbury as chairman of the Board of Commissioners in Lunacy; but it was hailed with satisfaction by others, and it came at last to be accepted on the belief that it was necessary to do something to allay the public agitation and suspicion which had been strongly aroused on the subject. The Bill passed through

the House of Lords, and as amended in committee was ordered to be printed on May 30th, 1885; but, owing to the change of Government occurring about that time and the rapid winding up of the session, it became a dropped order, and did not reach the House of Commons.

The principal objects sought to be attained by this Bill may shortly be stated as follows:—To furnish safeguards against the improper confinement of persons as lunatics; to give facilities for the medical treatment of persons who desire to submit to treatment; and to enable public asylums to be provided for the reception of lunatics not paupers. It was stated that the Bill adopted in the main the recommendations made by the report of the Select Committee of the House of Commons on Lunacy Law in the year 1878, and that the principle of the Scotch procedure had been adopted. No part of the Bill was more warmly discussed than Section 3, which provided that, except in cases of urgency, a person not a pauper should not be confined as a lunatic without an order of a county court judge, stipendiary magistrate, or justice, to be obtained upon a petition presented, if possible, by a relative, and accompanied by two medical certificates; and it was the retention of this provision in the Bill after protest against it by Lord Shaftesbury which led to his resignation, as already stated. It is perhaps unnecessary to remark that it is on this point also the Scotch procedure differs most essentially from the English; and much has been urged both for and against its adoption in England. In Scotland, except in cases of emergency or voluntary submission to treatment, with the previous assent of the Board of Lunacy, no person of unsound mind can be legally received into an asylum for the insane without the warrant of a sheriff, who is the principal legal functionary in each district. The sheriff grants this warrant upon the petition of a relative of the patient or other person, accompanied by the certificates of any two legally qualified medical practitioners resident in Scotland; but it is distinctly and clearly understood, and even stated by sheriffs, that they look upon their functions in this respect as "purely ministerial"; they consider their duty simply to consist in examining the various documents put before them, and if they are found accurately filled in the warrant is granted without further question; the alleged lunatic is neither seen nor examined by the sheriff personally, or those acting under him.

Now, it may be asked, where is the actual and real safeguard to the liberty of the subject here which does not already exist in the English Acts? In each country there is the same intervention of a relative or other person and of two medical practitioners. In England the "ministerial" act of the sheriff alone is wanting; but in place of this is substituted, and admirably substituted, the vigilant supervision of the Commissioners in Lunacy, for within twenty-four hours of the admission of a patient into an English asylum, a copy of the order of the relative or other person, who takes the place of the petitioner in Scotland, and the two medical certificates, must under penalties be submitted to the Commissioners in Lunacy. There is no "merely ministerial" performance of duty here; the slightest omission, flaw, or inaccuracy calls for amendment. Within a given time, or if the facts indicating insanity stated are vague or not sufficiently strong, a further statement of facts will certainly be called for, and if not forthcoming the patient may be summarily discharged. The framers of the Bill of last year seem, while adopting the Scotch procedure in the main, to have been fully alive to the weakness of the "merely ministerial" function assigned to the sheriff in Scotland, for it is expressly stated in the Bill that in order to give the county court judge, magistrate, or justice in England something more than "merely ministerial" functions in cases which require investigation, he is empowered, if he considers the statements in the medical certificates unsatisfactory, to make inquiries, and, if he thinks it necessary, to *visit* the alleged lunatic. The wisdom of the provision giving these increased powers to the civic authorities has been much contested by those who have had the best opportunities of watching the practical working of the Lunacy Acts. At a meeting of the Medico-Psychological Association, held at Bethlem Hospital in May last, this question was fully discussed, and the general feeling elicited during the discussion was that magisterial interference was not desirable in England, but if its adoption by the Legislature should prove unavoidable and unpreventable, that the evil should be minimised to the utmost extent. A resolution was finally agreed upon in this event, as follows: That the function of the magistrate to visit and examine a patient ought to be omitted from the Bill; that the power of the magistrate should be purely "ministerial"; and that, when any doubt on medical questions arose, the magistrate should only have power to direct a further medical examination. Thus the argument with regard to the desirability and the usefulness of the introduction of the magistrate &c. revolves in a circle.

I have, I think, succeeded in showing that the "ministerially" signed warrant of the sheriff in Scotland is a practically useless document in so far as it gives increased security to the liberty of the subject in that country. This is practically admitted in England, for it is proposed in the Lord Chancellor's Bill to give something more than "merely ministerial" functions; whereupon this proposal to extend magisterial powers in England, as compared with Scotland, is at once met by the almost unanimous opposition of those best qualified to judge of the effects of such magisterial interference upon the patient himself, his relatives, and the privacy of domestic affairs; and we are forced to return to the point in the circle from which we started, and the question once more presents itself—Is it or is it not desirable to alter the existing law at all on this point?

A further and important question, however, still remains open for consideration, which is closely connected with the desirability or otherwise of the introduction of the magistrate, and that is the degree in which protection would or would not be afforded under a warrant issued by a magistrate to members of the medical profession on whom the duty might devolve of signing the certificates. Should the magistrate be introduced in any future Bill, and his duties be defined in it to be "merely ministerial," possibly more responsibity would thus be thrown upon medical certifiers or witnesses than if the magistrate were empowered to act in his "judicial" capacity. In connexion with this arises the interesting question, What is the present legally protective value to members of the medical profession of the sheriff's warrant in Scotland? An answer to this from high legal authority would be exceedingly useful in solving many existing doubts on the subject. It may be remarked *en passant* that the Lord Chancellor's Bill as amended in committee contained the following clause, which seems to afford adequate protection to medical practitioners; and a similar clause must of necessity find a place in any future Bill if medical men are called upon under it to perform similar duties, otherwise they will probably be declined: "A medical practitioner who in the manner required by this Act signs any certificate that a person is of unsound mind shall not be liable to any civic or criminal proceeding for signing such certificate, or for any act done with the view of enabling the practitioner to sign the certificate, if the certificate is signed and the act is done in good faith."

No dissentient voice has hitherto been raised to the admirable principle announced of affording facilities for the medical treatment of persons who desire to submit to treatment. Clause 30 provides for voluntary residence in asylums of *any person* who has obtained the previous consent of the commissioners or visitors. This practice has been long in beneficial operation in Scotland, and it is not confined there, as at present it is in England, to persons who have within a period of five years been previously in an asylum under certificate. The same remarks apply to the new certificate of urgency. A clause certainly does already exist in the present English Acts which permits reception of a patient in cases of urgency on one medical certificate, but the steps which require to be taken subsequently neutralise its value. In Scotland the certificate of emergency is frequently used, and it is found very efficacious in enabling dangerous patients to be at once placed under proper care and control for a given period, during which, if necessary, more formal documents can be procured.

Finally, by Clauses 54, 55, and 56 of last year's Bill, power was conferred on justices of county or borough asylums to make such alterations in or additions to the asylum, either by way of detached buildings or blocks of buildings or otherwise, for the purpose of providing accommodation for lunatics not paupers; justices were also empowered to make provision for the reception of pauper and private patients together or in separate asylums, and also to provide separate asylums for patients suffering from any particular class of mental disorder. The powers thus conferred upon justices, although merely permissive, clearly would have enabled them to provide for the poorer classes other than paupers, by annexes &c. to existing county or borough

asylums; but the powers seem vague and ill-defined with regard to the provision to be made by justices for some 3321 patients of the upper and middle classes who are now resident in the metropolitan and provincial houses licensed for their reception by commissioners and county justices, the friends of whom would probably object to their removal from private and domestic surroundings suitable to their stations in life to the precincts of a pauper asylum. In introducing his Bill to the House of Lords, the Lord Chancellor, however, remarked that there was nothing to prevent justices purchasing for a fair value the existing licensed houses in which these patients are now under care, and converting them into public institutions.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Procemium.

ST. BARTHOLOMEW'S HOSPITAL.

A CASE OF DOUBLE POPLITEAL ANEURYSM; LIGATURE OF BOTH FEMORAL ARTERIES; RECOVERY.

(Under the care of Mr. MORRANT BAKER and Mr. BRUCE CLARKE.)

THE treatment of double popliteal aneurysm would be carried out by the majority of surgeons in a similar manner to that used in the following case. Some still object to the employment of digital compression before ligature, believing that such treatment injures the vessel and leaves the patient in a worse condition if unsuccessful. But when the pressure is properly regulated and skilfully applied, in cases where the artery at the point of pressure is healthy, no local damage arises, and after-ligature is quite satisfactory. As the risk of operation is increased by the simultaneous ligature of the two vessels, few would be inclined to perform it, although it has been done with success.

For the following notes we are indebted to Mr. Frederick H. Wigmore, house-surgeon.

J. P——, aged thirty-eight, a compositor, was admitted into Darker ward on Dec. 28th, 1885, suffering from double popliteal aneurysm. Three months previously he first noticed in the left popliteal space a pulsating tumour about the size of a walnut, which had gradually increased in dimensions. Two months ago he experienced very considerable pain in the right popliteal space, and his knee-joint was treated as for rheumatism. There was no history of individual injury or family history of aneurysm, but there was a distinct account of syphilis ten years ago.

On admission the man was pale and badly nourished, with numerous pits of small-pox on his face. In the left ham, and situated just behind the knee-joint, was a pulsating swelling about the size of a hen's egg. The whole tumour was very soft, and could be made almost completely to disappear by slight pressure when the common femoral was controlled by the finger; and if, while the sac was still compressed, the common femoral was allowed to go free the aneurysm was found to fill by gradually increasing leaps and bounds, three pulsations at least being required to distend it to its usual limits. The pulsation was expansile, and synchronous with the heart's beat. There was no thrill to be felt by the hand placed upon it, or bruit when the stethoscope was applied. The pulse in the tibial arteries was feeble. In the right leg there was a large and feebly pulsating tumour as large as a man's clenched fist, extending from between the hamstring tendons under the inner hamstrings as far round in front as the inner border of the rectus muscle, and on the outer side to the tendon of the biceps. There was a distinct thrill to be felt and bruit to be heard in the tumour, which was very painful. The patient had been losing flesh, and was manifestly very weak. His appetite was bad. The temperature was just above normal. The bowels were rather confined. The pulse at the wrist was strong, but intermittent. Urine: sp. gr. 1020; acid; contains phosphates, but no albumen or sugar. Both radial and tibial arteries were hard. An examination of the chest and abdomen disclosed the following physical signs:—Movements fairly good; vocal vibrations increased at right apex; no thrill to be felt. Heart's dulness normal. Right apex slightly impaired to percussion. A somewhat flatter note to be obtained in the second right intercostal space near sternum and over aorta. On auscultation expiration at right apex was found to be prolonged and tubular; vocal resonance increased over same area. Heart sounds: first sound thumping at apex; second pulmonary and second aortic sounds loud and forcible; aortic sounds conducted some distance from sternum; first aortic sound soft and altered, but not a murmur. Posteriorly the physical signs corresponded with those in front of the chest. No crepitant sounds anywhere. Liver and spleen not felt. Pulsations of abdominal aorta forcible and pronounced.

Since pressure upon the common femorals easily controlled the pulsations in the aneurysms, it was determined to try the effect of such pressure before resorting to ligature of the artery. Accordingly, at 3.30 P.M. on Jan. 2nd, a Holden's shot-bag containing 9 lb. was applied (a finger intervening) to the right common femoral, high up. The pulsations were readily controlled, and there was an increase in hardness of the sac. At 6.45 P.M. the patient was much exhausted, and the pressure was discontinued. The pulsation was almost checked, and the sac was very hard. The pulsation recommenced, however, in a very short time.

Jan. 3rd.—Pressure was applied from 9 A.M. to 1 P.M. and from 3 to 7 P.M. The result was not satisfactory, the pulsations being as strong as ever. Complains of some pain in the right tumour. Pulse 100; temperature subnormal.

5th.—On the right side the aneurysm seems to have extended a little up the limb, and pulsation appears to be strong over a wider area. Complains of some numbness.

6th.—2 P.M.: A discoloured patch observed on the skin over the right aneurysm. Œdema behind ankle. The aneurysm has extended slightly up the thigh. The patient was consequently taken down to the operating theatre, and, he having been placed under ether, the right femoral artery was tied by Mr. Morrant Baker at the apex of Scarpa's triangle. The artery was tied in two places with kangaroo-tendon ligatures and divided between, there being an interval of about three-quarters of an inch between the two ligatures. A small drainage-tube was inserted, and the wound, having been cleansed with warm carbolic lotion, was closed with silver sutures. The whole was dressed with sanitas oil (1 in 30 of olive oil), lint, and antiseptic gauze. The limb was carefully wrapped in cotton-wool, and hot bottles were placed in the bed.

7th.—Passed a good night. Has taken food well. Limb warm; no pulsation to be detected in the aneurysm. The tumour on the left side remains the same.

8th.—Toes warm and moist; blush returns after pressure. Temperature normal.

9th.—Aneurysm pulsates; has diminished in girth three quarters of an inch since the operation; wound dressed and looking well; sensation of limb unimpaired. The aneurysm of the left leg seems to have extended upwards and downwards in the popliteal space. No discolouration of the skin or œdema of the leg. Girth, 12¾ in.

11th.—Wound dressed and doing well. No change in left aneurysm.

12th.—Drainage-tube withdrawn, and not replaced. Left aneurysm appears to have extended, and the skin over it is slightly discoloured. Temperature subnormal. On account of the rather sudden alteration in the aneurysm, the left femoral artery was, in the absence of Mr. Baker, tied by Mr. Bruce Clarke near the apex of Scarpa's triangle in two places, and divided between. Kangaroo tendons were used as ligatures. A drainage-tube was inserted, and a dressing of moist carbolic gauze was applied.

14th.—The right wound shows some signs of slight discharge from the track of the drainage-tube; elsewhere it is healed. The left wound had its drainage-tube removed. The temperature has gone up to 101·5°; pulse 120.

15th.—Right wound looking exceedingly well; left wound appears healthy; no pulse in either aneurysm; sensation not impaired, and toes warm. Feels comfortable.

19th.—Right wound quite healed, and dressing discontinued.

20th.—Left wound is breaking down; pus discharging;

dressings blood-stained (venous). Temperature fluctuates between 98° and 100°.

21st.—Dressing on left side still blood-stained. A good deal of sanious pus expressed from the wound. Syringed with carbolic lotion, and dressed with carbolic gauze.

23rd.—Superficial veins of right leg somewhat distended. A vessel pulsates over the left aneurysm. Left wound improving.

28th.—Left wound much improved; some hardness surrounds it; discharge less. Temperature natural.

29th.—Left wound much better, but still discharges slightly; some hardness remains round wound; no pain; no rise of temperature; general condition excellent.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST.

AORTIC REGURGITATION, WITH ACUTE CONGESTION OF THE LUNGS, RELIEVED BY FREE BLEEDING.

(Under the care of Dr. SAMUEL WEST.)

ALFRED P——, aged twenty-five, was admitted on Dec. 4th, 1885, with extreme dyspnœa, due to cardiac mischief. Nine months ago a ton of clay had fallen out of the side of a tunnel upon his chest. He lay for two hours unable to move, and had to lay up for two days, after which he experienced no further distress until three months ago. He was then seized suddenly with shortness of breath, but without pain. This had got worse since. He had never had rheumatic fever, but his work was hard and he had drunk heavily. His feet had gradually swollen, and he had been much worse for the last fourteen days.

On admission the dyspnœa was extreme, and the patient was somewhat cyanosed. There was much œdema of the legs. A double murmur was heard over the whole præcordium, which was thought to be probably friction. The patient was put to bed and slept quietly till 8.30 A.M., when he was suddenly seized with severe dyspnœa. He was greatly distressed and excited, throwing himself about. He became more and more cyanosed, and spat up some bright bloody sputum. The lungs became rapidly engorged, and he seemed to be dying. It was clear that he had an attack of acute congestion of the lungs of cardiac origin, and that he would die unless relieved in some way. The sister in charge, a woman of thirty years' experience, said he was lost and nothing could save him. It was decided to bleed him. This was done at once to the extent of nearly a pint from the arm, and as the blood flowed the blueness diminished and the breathing was relieved. A little opium and ether were given, and in an hour all immediate danger was past. The pulse, which before bleeding was thumping and hard, became slower and softer, and by midnight the sputum had ceased to be blood-stained.

Dec. 5th.—Heart's action quieter; loud double aortic murmur audible.

6th.—Patient better. Cardiac dulness extends to the right of the sternum, and upwards to the third rib; the apex is in the mid-axilla in the sixth space. The liver is much enlarged downwards and painful. The œdema is less, and the bronchitis and the cyanosis are almost gone.

From this time the improvement was continuous up to a certain point, the patient of course remaining in bed, but being comfortable and sleeping and eating well. He remained in a stationary condition for about a month, and then the œdema began to increase and the patient to slowly but steadily lose ground, and he finally died on Jan. 22nd, without further symptoms of importance. The temperature had risen to 101° during the last week of life.

The post-mortem showed disease and rupture of the aortic valves. The left anterior was chiefly affected; it was torn, and a free tag had rubbed the septum and led to endocarditis, with the formation there of a small aneurysm.

Remarks by Dr. WEST.—The acute symptoms on admission I attributed to sudden failure of the heart, the rupture of the valve having taken place three months before, according to the history; as no infarct was found in the lungs this explanation was probably correct. The great interest of the case lies in the effect of the bleeding. The patient was at the time actually dying, and it seemed almost hopeless to do anything; but the only thing was bleeding, and that copiously. The effect was like that of a charm, for as the blood flowed the threatening symptoms disappeared one by one, and the danger passed away. It may seem heroic to bleed freely in aortic disease, and such treatment would be in place only in exceptional cases, but I have no doubt that in this case the prolongation of life for seven weeks may be rightly referred to the treatment adopted. Bleeding in the chronic pulmonary of mitral disease to relieve a dilated right ventricle is a recognised and not unusual method of treatment. The present case shows that it may be equally in place in appropriate cases of aortic disease.

EDINBURGH ROYAL INFIRMARY.

ANEURYSM OF THE ABDOMINAL AORTA.

(Under the care of Dr. BYROM BRAMWELL.)

G. S——, aged thirty-two, a foreman labourer, presented himself on Jan. 2nd, 1886, complaining of pain in the back and a swelling in the abdomen. The patient, a very big and formerly very muscular man, who was now somewhat pale and flabby-looking, stated that the pain in the back commenced several months ago, and that for the past five months he had been under treatment (rest and iodide of potassium, sixty grains three times daily) in the Sunderland Infirmary. On inquiry, it was elicited that he had been subjected to very heavy work and strain, that at one time he had drunk freely, and that he had had a soft chancre and bubo, but no secondary syphilitic symptoms.

Physical examination.—A large pulsating tumour, the pulsation being lateral and expansile, extended from the zyphoid cartilage to within half an inch of the umbilicus, and was situated for the most part to the left of the middle line. On auscultation, a well-marked systolic murmur was audible over the tumour in front and on both sides of the spine (louder on the right than on the left side) behind. The patient stated that he was somewhat short of breath on exertion. The right pupil was smaller than the left; there were no symptoms of intra-thoracic pressure; the pulses were equal, and the heart seemed normal. No dulness was detected over the manubrium sterni, but some pulsation could be felt deep down in the supra-sternal notch. When the patient lay on his back with his head low, both heart-sounds were very distinctly heard over the manubrium sterni, and there was at the same spot very distinct bronchial, almost tubular, breathing; there was also, when the patient was in this position (flat on his back with the head low), some apparent pulsation in the veins at the root of the neck. When the patient sat up and leaned the head forwards, the tubular breathing and venous pulsation in the neck disappeared and the localised loudness of the heart-sounds was much less audible.

Remarks.—Dr. Bramwell emphasised the fact that when a robust and apparently healthy man complains of a fixed pain in the back, an aneurysm of the abdominal aorta should always be suspected; the suspicion was strengthened if the patient had led a laborious life, had been subjected to heavy strains, had drunk hard, or had had syphilis. It must be remembered that a cicatrix in the groin or in the penis, though presumptive, was not certain evidence of syphilis. In this case there could be no doubt as to the nature of the condition, but the diagnosis of an aneurysm of the abdominal aorta was not always an easy matter. A case was mentioned in illustration of the difficulties of diagnosis in which the aorta was encased in a mass of cancerous glands; in that case there was: (*a*) very severe pain in the back; (*b*) a tumour fixed to the spine, localised in the course of the aorta, and presenting most distinct lateral and expansile pulsation; together with (*c*) a systolic murmur audible both over the tumour in front and over the back behind. The physical signs of an aneurysm of the abdominal aorta were, in fact, exactly simulated; and it would have been impossible to have arrived at a correct diagnosis had it not been for the fact that a lump, the size of a small orange, evidently a malignant growth of rapid formation, was situated just above the left clavicle. A systolic murmur was very generally present in aneurysms of the abdominal aorta; this was not the case in aneurysms of the thoracic aorta; in that condition, provided that the cardiac valves were healthy and there was no murmur conducted from the heart, a murmur was more often absent than present; a murmur might be said to be absent under such conditions in at least 50 per cent. of the cases. It must not, however, be supposed that a systolic murmur heard over the abdominal aorta was distinctive of aneurysm. This was more especially the case when auscultation was made from the

front, in which position the mere pressure of the stethoscope, by constricting the vessel, was sufficient to produce a murmur. When, however, auscultation was made from behind, this source of error was avoided. If a murmur were heard in the vertebral groove behind, and if the observer were satisfied that it was not propagated from the chest, but generated in the abdominal aorta itself, it was very strong, but by no means conclusive, evidence of aneurysm. In the above case the murmur was heard more loudly in the right than in the left vertebral groove; this probably showed that the aneurysmal sac was attached to the right side of the spinal column, notwithstanding the fact that in front this aneurysmal tumour was placed to the left of the middle line. Dr. Bramwell did not feel quite certain that in auscultating the back he might not have mentally reversed the two sides by mistaking the right for the left, as one is sometimes apt to do; if this had been the case, the error would probably have been brought to his notice by some of the students who subsequently examined the patient. The exact cause of the shortness of breath which the patient felt on exertion was not definitely ascertained. The tubular breathing and localised loudness of the heart-sounds over the manubrium sterni, and the venous pulsation at the root of the neck, were possibly due to the presence of a small aneurysmal sac filled with solid coagula under the upper part of the sternum. A case was referred to in which somewhat similar physical signs were proved on post-mortem examination to be due to this cause. This was merely advanced as a suggestion and not as a diagnosis. As the result of a single and somewhat hurried examination, Dr. Bramwell did not feel himself able to express a positive opinion on the point. There was no dulness on percussion. The pulsation in the supra-sternal notch was not of much corroborative value; it might be due to simple dilatation of the aortic arch, and was, indeed, not unfrequently present in perfectly healthy persons.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Harlequin Fœtus.—Cardiography.

AN ordinary meeting of this Society was held on Tuesday last, Mr. G. D. Pollock, F.R.C.S., President, in the chair.

Mr. J. B. SUTTON read a paper on a case of General Seborrhœa or "Harlequin" Fœtus. The case was a typical example of what is usually known as the "harlequin" fœtus. Although the condition is a very rare one, it has received a variety of names; but as the term "general seborrhœa" expresses the pathology of the disease, and that of "harlequin fœtus" is an excellent clinical expression, both have been retained. Details of the microscopical characters of the skin were given, and an argument was furnished for regarding the affection as being due to abnormal formation of the vernix caseosa, which, instead of being shed into the amniotic fluid, forms concrete masses which adhere to the skin. The paper ends with an appendix containing references to all the recorded cases known to the author.—Dr. COLCOTT FOX said that all authors were of opinion that the disease was limited to the epidermis. No doubt there were cases of general seborrhœa which differed, however, in the circumstance that the termination is not necessarily fatal, which is the invariable result of the harlequin fœtus. Kyber called it a diffuse keratosis; a purely developmental anomaly of the epidermis. Charles Robin and Chambard, with all recent authors, concurred in this view. Kyber said the disease began before the development of the sebaceous glands. What alliances had this condition with true ichthyosis? Though Hebra and Kaposi had asserted that true ichthyosis began in all cases some time after birth, yet Dr. Fox felt sure that this was incorrect, for he knew of some cases in which the ichthyotic skin was certainly congenital. He believed that true ichthyosis and the harlequin fœtus were of identical nature.—Dr. RADCLIFFE CROCKER had examined the skin in Mr. Sutton's case, taken from the scalp and chest, and he dissented from the author's view of the microscopic appearances. The disease was an ichthyosis. There was no kind of seborrhœa that produced any such change; and in seborrhœa the skin beneath was perfectly healthy. Hebra asserted that in the harlequin fœtus there was not the enlargement of the papillæ that pertained in ichthyosis, but Dr. Crocker had found the papillæ much elongated in Mr. Sutton's specimen. An extension downwards of the inter-papillary pillars of the rete Malpighii was also observed. Further, the horny layers dipped down and followed the conformation of the papillary layer. Dr. Crocker believed that ichthyosis congenita was a proper name for the disease.—Dr. CHARLEWOOD TURNER also agreed with the conclusions of Dr. Fox and Dr. Crocker. A defective secretion of sebum led to the accumulation of epidermal scales. He considered that there was a defective development, and not a hypertrophic condition.—A FELLOW, after referring to the uncertain state of knowledge concerning the source of the liquor amnii, asked whether the liquor amnii were deficient or altered in any way in Mr. Sutton's case.—Mr. J. B. SUTTON admitted that there was room for a difference of opinion as to the microscopic nature. The masses on the skin were most marked where the vernix caseosa occurred in the greatest quantity, and the disease developed from the fourth to the eighth month of fœtal life when the sebaceous secretion was most active, so he considered that there was an excessive amount of sebum in the masses on the skin of the harlequin fœtus.

Dr. PAUL CHAPMAN communicated a paper on Cardiography, with special reference to the relation of the duration of the Ventricular Systole to that of the Diastolic Interval. The author, after discussing previous works on the subject, especially that of Dr. A. H. Garrod, gave a table of measurements, taken from healthy individuals, of the duration of ventricular systole and diastole in each cardiac revolution, for every increase of five beats in frequency per minute between 45 and 150. He showed that in the human subject the duration of systole diminishes by a constant quantity as the pulse frequency increases, the constant diminution being ·0085" for every increase in frequency of five beats in the minute. He gave this table as one which might be safely used by future workers as a basis of comparison for estimating departures in disease, while emphasising the fact that the duration of ventricular systole may vary, in health, from the measurements given in his table within the limits of ·02"; an increase being most common with the lower pulse rates. A decrease at the higher rates extending beyond the limit above mentioned must be considered abnormal. The influence of increase or of diminution of blood-pressure on the duration of ventricular systole was discussed. The importance of the rapid diminution in duration of systole providing the heart with an increased amount of rest was pointed out; and it was remarked that a high pulse frequency is not necessarily attended with rapid cardiac failure; though in some cases rapid failure did quickly ensue. Marked departures from the normal relative duration of systole and diastole were then noticed. The results of experiments with digitalis and convallaria majalis were given, and illustrative tracings shown. The instrument employed in making the observations was the air-containing cardiograph of Dr. Burdon Sanderson.—Dr. BROADBENT considered that the profession was indebted to Dr. Chapman for the labour that he had bestowed on the subject. The relation in time of the systole to the diastole was of much importance; there were cases in which no cardiographic tracing could be obtained. He had been interested in the subject before the appearance of Dr. Garrod's paper. He believed that the relative duration of systole and diastole could be gauged accurately by the stethoscope, and this had been his special method of observation. The clinical interest and prognostic importance of the gradual diminution of the duration of systole were remarked upon. The cardiograph gave tracings which were consistent with stethoscopic observation. He considered, in opposition to Dr. Chapman, that blood-pressure had a great deal to do with the diminution of the duration of systole. In fevers the diminution was due to diminished resistance in the peripheral circulation. In some pyrexiæ no diminution occurred, as in scarlet fever, during the early stage, with a frequent pulse, when the arteries were not relaxed. The normal rhythm might be lost, and auscultation reveal the complete "tic-tac." The diastole might be actually shorter than the systole. Similar phomomena were met with in acute renal disease, in which a slight elevation of temperature was accompanied by considerable increase in the peripheral resistance. In some cases of acute albuminuria the heart rhythm varied almost from day to day; here cardiac exhaustion played a part. He had also observed the lengthening of systole gradually diminish as the heart

gained power. In cases of heart failure in diphtheria, when the interval between the first and second sounds was diminished, we had an early and very significant sign of the cardiac exhaustion. The precipitate following of the second sound on the first sound was due to an imperfect emptying of the ventricle, and he also conjectured that the second sound might appear before the ventricle had ceased to contract. Controlled by careful stethoscopic examination, he believed that cardiographic tracings were of considerable value.—Dr. A. E. SANSOM spoke of the value of Dr. Chapman's observations. He had used the cardiograph clinically for many years past. In his early observations he had used Jalabin's instrument, but later Pond's sphygmo-cardiograph. The cardiograph was, in his opinion, of much practical value. It was possible to distinguish mitral stenosis from aortic regurgitation with a thrill by means of the cardiograph. This he had verified in two recent cases. In mitral stenosis the diastolic interval was much elongated in the ratio to systole, as 1 to 1·8. This was regarded as an important point in the diagnosis of mitral stenosis, together with marked irregularities in rhythm. In a case of mixed aortic and mitral regurgitation the ratio of systole to diastole was 1 to 0·3. Digitalis might be very harmful in some cases of aortic regurgitation by prolonging the duration of the diastole.—Dr. ANGEL MONEY, working with Gowers' cardio-sphygmograph, had come to the following conclusions: That the cardiograph was valuable as a record of the mode of action of the myocardium in some cases of heart disease, but it was an incomplete record. Careful auscultation and palpation were of more value in determining the state of the myocardium, and, consequently, in giving a prognosis. Cardiograms were, in his opinion, of but little value in diagnosing the nature of valvular lesions. Mitral stenosis frequently gave an almost special cardiogram, but even this might be simulated by a healthy heart under the influence of emotional excitement. He possessed cardiograms taken from different forms of valvular lesion which could not be distinguished from one another.—Dr. CHAPMAN, in reply, could not agree with Dr. Sansom that the lengthening of the diastole was absolutely characteristic of mitral stenosis; lengthening might happen from many other causes than this form of valvular lesion. He concurred with Dr. Money in thinking that the cardiograph revealed and recorded the state of the myocardium as to muscular or nervous exhaustion. He would employ it clinically rather with a view to prognosis than diagnosis.

MEDICAL SOCIETY OF LONDON.

General Annual Meeting.—Spastic Paralysis.

THE annual general meeting of this Society was held on March 1st, at 8 P.M., after which the ordinary meeting took place, Dr. W. M. Ord, the retiring President, in the chair. The treasurer, Mr. A. E. Durham, read the report of the financial affairs, which showed that the Society was in a prosperous condition. The hon. librarian, Dr. W. H. Allchin, read a report on the state of the library, which had now been fully catalogued. Dr. Ord and Mr. Durham had each contributed £20 towards the expenses of the library. Dr. Kingson Fowler read the report of the trustees of the Fothergillian Fund. The subject of the Fothergillian Prize has not yet been selected for the year 1888. Mr. Arthur E. Durham moved, and Dr. Sutherland seconded, a vote of thanks to Dr. W. M. Ord on the termination of his presidency. Mr. Noble Smith moved, and Dr. Allchin seconded, the vote of thanks to the retiring vice-presidents and other retiring members of the Council. Dr. Coupland proposed, and Mr. Harrison Cripps seconded, the vote of thanks to the retiring secretary, Dr. J. Kingston Fowler. This resolution was carried with acclamation, and Dr. W. M. Ord spoke of the very valuable services that Dr. Fowler had rendered both to the President and the Society at large. The report of the scrutineers of the ballot (Drs. Hayward and Sutherland) showed that the gentlemen nominated by the Council for office for the ensuing year had been unanimously elected. (*Vide* THE LANCET, p. 400.)

Dr. W. HUGHES BENNETT read a paper on Spastic Paralysis, which appears *in extenso* in our present issue.—Dr. HUGHLINGS JACKSON said he believed he was responsible for the view that increased muscular action of spastic states might be attributed to loss of cerebral influence. Abolition of the functions of local inhibitory centres of the spinal cord was a hypothesis advanced by Gowers, and accepted by him. He still was of opinion that some forms of rigidity were due to unrestrained cerebellar influences, as, possibly, in the rigidity of paralysis agitans. Mention was made of a case of epileptic attacks in which the clonic spasm was almost limited to the left arm, yet after the fits, which were very numerous, the knee-jerk was first abolished on that side, though later on it increased and ankle-clonus developed; even at the onset of a fit the knee-jerks were exaggerated, although the legs were not affected with clonic spasm.—Mr. VICTOR HORSLEY said that in artificial degenerative processes the same exaggerated phenomena pertained as in disease in man. He did not think the hypothesis of Gowers—that of miniature inhibitory centres of the spinal cord—would help to explain matters. Richet had worked very fully at the phenomena of hypnotism. The paper by Dr. Bennett raised the question of the connexion between higher and lower centres.—Dr. ANGEL MONEY advanced reasons for thinking that the hypothesis of Gowers might prove of value in understanding the phenomena of temporary rigidity.—Mr. HARRISON CRIPPS spoke of the mechanical contraction of muscles in old cases of spastic paralysis.—Dr. W. M. ORD hoped that the discussion would tend to throw light on the clinical value of the phenomena.—Dr. W. B. HADDEN said that he had noted ankle-clonus in a case of pernicious anæmia; the necropsy showed that there was lateral and posterior sclerosis. In a case of chronic right hemiplegia and hemi-spasm he had detected no change in any part of the nervous system, nor also in a case of fatal tetany. He had seen ankle-clonus in the sound leg when a patient had been laid up with fracture of the opposite leg. In his opinion sclerosis did not necessarily produce rigidity or exaggerated reflex phenomena; on the other hand, we might have the phenomena of hyperkinesis in the absence of lateral sclerosis.—Dr. ORD said that the case of pernicious anæmia already alluded to occurred in a robust and ruddy railway guard, whose disease began after a curious shock which the patient described as ascending up the left arm and down the left side. He was interested to know how far the anæmia might have been dependent on the spinal lesions.—Dr. BEEVOR considered that spasm and increased deep reflexes might not be due to the same cause; they did not always appear together; the latter frequently preceded the former. After ordinary epilepsy he had observed ankle-clonus and increased knee-jerks on the side most convulsed.

Aneurysm of Aorta.

At an ordinary meeting held on Monday last, Mr. R. Brudenell Carter, F.R.C.S., the new President, in the chair,

Dr. W. H. WHITE read notes of a case of Aortic Aneurysm that occurred in a married woman aged forty-three. When first seen she was suffering from intermittent pain and vomiting, possibly due to a gall-stone; she had suffered once seven years previously from the same complaint. On Feb. 20th, 1885, the urine contained bile, and Dr. White noted the following symptoms: Left pupil smaller than the right; right and left jugular veins were swollen; the left radial pulse was weaker than the right. There was a distinct thrill about the second right costo-sternal articulation, and also slight pulsation in the supra-sternal notch and first right intercostal space; about the same area there was dulness and a loud to-and-fro murmur. There was no sign of pressure on the recurrent laryngeal nerve and no dysphagia; the left chest expanded less than the right. Profuse perspiration and thirst were marked symptoms at times. Later in the course of the case there was dulness of the left side, with absence of vocal fremitus and breath sounds. Hæmoptysis was occasionally present. The pain at times called for the administration of hypodermic injections of morphia. The patient died in a state of collapse, accompanied by profuse hæmoptysis, on Jan. 21st, 1886. Rest in bed, low diet, and iodide of potassium were the agents used in treatment. Ergot lessened the volume of the pulse, and appeared to control the hæmorrhage. At the necropsy some fluid was found in the left pleural cavity. The heart was slightly enlarged, its cavities empty, and the left ventricle somewhat hypertrophied. The aorta was greatly distended, much thickened by atheroma, and sacculated. The left bronchus was blocked, and the left lung collapsed; the left pulmonary artery was also somewhat pressed upon. There was a fibroid tumour of the uterus. The uterus, ovaries, and peritoneum were the seats of round-celled sarcomata, which also existed in the left lung. A

round-celled growth also occurred in the adventitia of the aorta. The aneurysm had extended backwards and to the left, causing erosion of the vertebræ. — Dr. DE HAVILLAND HALL read notes of a case of Aneurysm of the Aorta in a man aged thirty-six, in whom there were four distinct aneurysms. The voice was affected early in the disease. The patient was first seen on July 1st, 1885. There were pain in the shoulder, headache, dyspnœa, deficient entry of air into the left lung, absence of pulsation in the left axillary, brachial, and radial arteries, and the right brachial was very rigid. There was a cataract of the left eye. Percussion revealed a dull area at the apex of the left lung; later on, pulsation and bulging developed at this site. Feeble pulsation in the left radial and brachial arteries returned. The dulness increased in area. Pain was experienced in the right mammary region. Dulness appeared in the second right interspace. A diastolic bruit was heard at the base of the heart, which varied in distinctness from time to time. Death ensued on Feb. 12th, 1886. At the necropsy sixteen ounces of serum were found in the left pleural cavity and one ounce in the pericardium. A tumour as large as a cricket-ball was detected at the top of the left side of the thorax. Both lungs were œdematous. An aneurysmal dilatation was detected at the first part of the arch of the aorta the size of a Tangerine orange; another large aneurysm was present at the junction of the second and third parts of the aorta, nine inches in circumference. The left pneumogastric nerve was destroyed. The left carotid ran along the wall of the large aneurysm for three inches. The aortic valve allowed of slight regurgitation. There was a large dilatation of the first part of the arch, and the third aneurysm opened out of this. The diagnosis was made by Dr. Hall as soon as the laryngoscopical examination revealed paralysis of the left vocal cord. In treatment with iodide of potassium, he advocated the same principles that Dr. Balfour had recently laid down in THE LANCET.—Dr. C. THEODORE WILLIAMS referred to the stridulous character of the voice that obtained in some cases of aneurysm—a stridor which was particularly remarkable when the patient coughed. Cancer of the mediastinum might give rise to paralysis of the left vocal cord.—Dr. W. M. ORD thought the interest of Dr. White's case was chiefly pathological. Dr. de Havilland Hall's case appealed more to the clinical physician. A murmur at the site of the orifice of the pulmonary artery was occasionally present in cases of aneurysm of the sinus of Valsalva. In all cases of alteration of the voice the larynx should be examined. In a large number of cases the vocal cord was fixed in the position of adduction, and not in the cadaveric position. Dr. Ord had taken tracings from aneurysms which, from having fluid contents, became solid and yielded tracings with the cardiograph similar to those obtained by Dr. Richardson.—Dr. S. WEST asked whether Dr. White considered there was any causal relationship between the sarcoma and the aneurysm. The number of cases in which blood-casts were expectorated and the patient lived for a long time was not great. In a case of phthisis he had met with those blood-casts.—Dr. D. W. FINLAY spoke of the value of iodide of potassium in the treatment of aortic aneurysm.—Dr. A. ROUTH alluded to the occurrence of menstruation within ten days of death, when the ovaries were so much diseased.—Dr. WHITE, in reply, repudiated the notion that the aneurysm was in any way causally related to the sarcoma.—Dr. DE HAVILLAND HALL said in his case the left vocal cord was in the cadaveric posture because both adductor and abductor muscles were paralysed; there was no stridor, and none was to be expected, as the rima was freely open.

ACADEMY OF MEDICINE IN IRELAND.

Dentigerous Cyst.—Perforating Ulcer of the Stomach.—Bright's Disease.

AT the meeting of the Pathological Section on Jan. 15th, Mr. ARTHUR BAKER read a paper on a case of Dentigerous Cyst occurring in the lower jaw of a boy aged sixteen. The tumour had existed for six months previous to operation. When opened an unerupted canine tooth was found at the bottom of the cyst. This tooth showed the malformation known as dilaceration of its root. The importance of diagnosing cases of this disease was shown by the fact that in a similar case, where the cyst was not recognised, one-half of the jaw had been excised.—Mr. STORY said there was only one other case on record in which a dilacerated tooth was found occupying the cavity of one of those so-called dentigerous cysts.—Dr. MACSWINEY said cases of teething were sometimes met with in children, where it seemed impossible for the unaided powers of the child to erupt the tooth, and on such occasions he had seen a soft tumid condition over the tooth, which had not escaped through the gum, and which, when incised with a gum lancet, had given exit to a clear viscid fluid. There was in such cases a sort of cyst under the unbroken gum and resting on the crown of the tooth.

Dr. FINNY exhibited an extremely rare specimen of an Oval Ulcer (one inch by half an inch) of the Stomach, situated on its anterior wall two inches and a half from the cardiac and two from the lesser curvature, leading up to and perforating the heart. The floor of the ulcer was the muscular structure of the under surface of the left ventricle, about one inch from the apex; and the ulcer, after perforating the stomach, had eaten through the diaphragm and the pericardium. The stomach was adherent to the diaphragm round the ulcer, but the adhesions were very slight and of recent date. The pericardial sac had been obliterated by adhesive inflammation, and over the whole of the left ventricle the adhesions were very dense. Through the larger of several interstices between the exposed muscular tissue of the apex a probe could be passed upwards, and was found to enter the left ventricle behind a musculus papillaris attached to the posterior mitral curtain. The patient from whom the morbid specimen was removed had died of syncope on December 9th, 1885, preceded by the passage of blood from the bowels. Strange to say, there was no hæmatemesis. At the necopsy the stomach and the whole intestinal canal were found full of liquid blood, the stomach alone containing two quarts. The source of the blood was the left ventricle, and it is probable that it escaped into the stomach during both systole and diastole. The fatal steps in the pathological history of the case were: (1) Ulcer of the stomach, of unknown duration; (2) rheumatic pericarditis and adhesions of the left ventricle to the diaphragm, with obliteration of sac; and (3) recent activity in the ulcer perforating into the muscle of the heart. The general muscular structure of the heart under the microscope was perfectly normal, and free from fatty degeneration, except the fibres at the floor of the perforation, which were granular and broken down, though free from all fat. Dr. Finny referred to the anatomical relations of the liver and stomach to the diaphragm, and stated by observations made, that while, in the majority of instances, the liver by its left lobe entirely separates the stomach from the portion of the diaphragm to which the pericardium is applied, there are exceptional specimens where the left lobe of the liver is small and pointed, where a small triangular portion of the extreme front of the pericardial aspect exactly corresponds to the anterior wall of the stomach in the very position of the ulcer present in this case. There are three similar cases recorded in Vienna: the first by H. Chiari in 1880, the second by F. Brenner, and the third by Oser in 1881; and each of these observers, like Dr. Finny, seemed to have been unaware of the other reported cases.—Dr. FRAZER had seen two cases of gastric ulcer, both of which occurred in young females, and were attended by rupture. In both the patients survived for a time—one for some years. He was enabled, by the recurrence of the rupture in both cases afterwards, and by circumstances brought under his notice after death, to verify the fact that the ulcers had perforated the stomach and had afterwards healed.—Dr. DUFFEY said he had observed a case of ulcer of the stomach in which an opening was formed into the lungs, causing a gangrenous abscess. He presented the specimen to the museum, and it was now on the table of the College of Surgeons. The case reported by Professor Chiari occurred in a woman seventy-one years old. That of Professor Oser was in a woman of the same age. Brenner's case occurred in a woman of fifty-five.—Dr. HENRY KENNEDY said, according to his experience, when the ulcer was on the anterior wall of the stomach, the suffering was very much less than in other cases, and was also intermitting. On the other hand, when the ulcer was down near the pylorus, the pain was nearly constant on the occasions of taking food.—The PRESIDENT remarked that Dr. Finny, speaking of the manner in which the ulcer, after perforating and causing an adhesion of the pericardium, made its way to the ventricle of the heart, laid stress on what he called solution by the gastric juice of the muscular wall of the heart. That seemed rather a startling novelty in

pathology, and he should prefer to arrive at some other explanation of the fact. The idea of solution by gastric juice was suggested by Chiari's case, in which it was stated that the muscular fibre of the heart round the situation where the rupture occurred was in a condition of fatty degeneration. Unless there was some very good evidence that the solution in Dr. Finny's case was caused by the gastric juice, he would incline to think that some form of degeneration was present also. Hardly any part of the abdominal viscera was subject to so much irregularity as to position, size, and shape as the left lobe of the liver. Therefore what had occurred in Dr. Finny's case did not present any great difficulty to his mind.—Dr. DUFFEY said there was one circumstance mentioned in Chiari's case which, although no weight was attached to it by the reporter, might be of importance—namely, that in the wall of the sac close to the opening into the stomach a hard brittle mass was found, which chemical examination proved to be composed chiefly of silicates, and which was probably a piece of glass that had been accidentally swallowed.—Dr. MACSWINEY said that solution of tissue by gastric juice was only possible after there had been necrosis of the tissue. In Dr. Finny's case a portion of the pericardium might have become dead tissue.—Dr. FINNY, in reply, said in his case the specimen contained no foreign body. He thought the fact of a chamber having been formed between the heart and the pericardiun showed that probably a gastric ulcer first formed the abscess, and that it opened from the stomach, forming a smaller one underneath the diaphragm, and thence reached the pericardium. Having regard to the slight character of the adhesion between the outer surface of the stomach and the diaphragm, he did not think the passing of the ulcer through the diaphragm could have set up such pericarditis as was found in the case. He thought that pericarditis was due to a rheumatic attack which had preceded the perforation of the diaphragm by the ulcer from the stomach. Nor did he see any difficulty about the solution of the muscles of the heart by the gastric juice. Dr. Purser and Dr. Bewley, who had examined the floor of the ulcer and the granular muscular tissue of the heart, would bear him out in the statement that not the least appearance of fatty degeneration was exhibited by the portions of those parts that were examined under the microscope. The base of the ulcer and the muscular tissue of the heart were turned into a granular débris, which was the result of the solution. The rest of the heart was perfectly healthy, and showed no sign of fatty degeneration whatever. Nor did he see why the heart should not have suffered from the action of the gastric juice, when they saw that the tendinous portion of the diaphragm, which opposed the progress of the ulcer, was dissolved by the gastric juice at the floor of the ulcer. Having thus gone through the diaphragm, which was of its full thickness, the gastric juice might have acted in a similar way on the muscular tissue of the heart.

Dr. A. W. FOOT showed Kidneys as representative examples of the last stage of parenchymatous nephritis when the organs have undergone atrophic changes. They exhibited the variety of Bright's kidney called by Dr. G. Johnson the "small fatty kidney." The specimens were obtained from the body of a labouring man of thirty-three years of age, who had been habitually exposed to the cold and moisture of the Wicklow mountains in which he lived.

CAMBRIDGE MEDICAL SOCIETY.

AT the meeting held on January 8th the following communications were made.

Salivary Calculus of Unusually Large Size.—Mr. CARVER showed this specimen, which he had removed from a man aged seventy. It formed a swelling in the floor of the mouth to the right of the middle line, and just behind the sublingual gland, and when explored with a needle was found to be of stony hardness. It was easily removed with scissors. The patient had only noticed some tenderness there for about five or six weeks. There was no enlargement of any of the salivary glands or other symptoms. The stone was ovoid in shape, pointed at both ends, and of a pale yellowish-white colour. It weighed 141½ grs., and measured 1 7/10 in. by ½ in. broad, with a circumference of 2¼ in. to 3 in. Mr. Carver remarked upon the large size of the calculus, it being one of the largest ever recorded. These calculi were not uncommonly found in the ducts of the sublingual and submaxillary glands, but were rare in Steno's duct. The severity of the symptoms was by no means commensurate with the size of the calculus, in many cases great swelling of the glands and surrounding irritation being caused by a very small concretion.

Retro-uterine Hæmatocele.—Dr. BRADBURY read the notes of Charlotte C., aged twenty-eight, married, admitted into Addenbrooke's Hospital on May 13th. All her sisters suffer from excessive menstrual periods as well as herself. She was quite well till marriage nine years ago, but nine weeks afterwards miscarried, and was laid up for some time. She subsequently had several miscarriages, with pain and hæmorrhage, and bore one child at full term, but suffered from post-partum hæmorrhage. The history of the present illness was that she went ten days beyond the time for her menstrual period, and then had severe bearing-down pain, followed by profuse hæmorrhage and sickness. She became blanched, with sinking pulse, faintness, and noises in the ears. Vaginal examination showed the os uteri to be more open than normal. The abdomen was distended and tender, and the patient was unable to micturate, and kept her legs drawn up. After a time the distension gradually subsided, allowing a swelling to be felt just below the umbilicus, tender to the touch, fairly resonant all over except in left iliac fossa, and friction could be heard over it. The bladder contained three ounces of urine. Per vaginam, the uterus was pushed close under the symphysis pubis, and Douglas's pouch was distended by a soft doughy mass. On June 8th she passed a quantity of blood by the bowel; soon after the tumour began to subside. On the 19th she had a slight attack of pleurisy, but continued to improve in every other respect. On July 24th the swelling in Douglas's pouch had disappeared, leaving the uterus anteverted and more fixed than natural. On Aug. 15th she was discharged, being almost well. The temperature chart during the first three weeks showed an evening rise to about 102°, and morning between 99° and 100°, for the rest of the time being slightly above the normal. Dr. BRADBURY remarked that this was a well-marked case of pelvic hæmatocele in a hæmorrhagic subject. Was it due to abortion, or had the menstrual period been delayed? There was at first no swelling to be felt in Douglas's pouch; the blood afterwards gravitated there and formed a tumour. The symptoms were very like those of parametritis, but the passage of blood per rectum and the diminution of the swelling cleared up the diagnosis. The treatment was rest in bed, and a hypodermic injection of one-sixth of a grain of morphia when the patient was suffering from the effects of the hæmorrhage, which proved very effective.

Tubercular Meningitis following soon after a Blow on the Head.—Mr. MARTEN was able, through the kindness of Dr. MacAlister, under whose care the patient was placed, to bring forward the case of a boy aged seven, who previous to his fatal illness had appeared to be enjoying fairly good health, with the exception of slight discharge from both ears, which had persisted for some months. His head was knocked against a wall on Dec. 10th, and from this date he was unable to attend school, suffering from sickness and persistent headache. He continued to go about till the morning of the 20th, and was then found by his mother totally unconscious. He remained in the same condition till the 22nd, when it was noted that he was perfectly unconscious, the pupils equal and reacting to light, the breathing quick and shallow, pulse small but regular, lips covered with sordes, tongue thickly coated, abdomen much retracted, tâche cerebrale very marked, and all the limbs quite stiff. He continued in the same unconscious condition, and died ten days after the blow was received. The mother, one brother, and sister had died of phthisis. The post-mortem showed the body to be well nourished; no evidences of any injury. On removal of the skull-cap the convolutions of the brain were found to be much flattened, and a few tubercles were seen scattered about its base and up the Sylvian fissures, with obvious meningeal inflammation around. There was a marked excess of fluid in the ventricles, and a dilated foramen of Munro. The lungs were studded with tubercles, especially at the apices. The kidneys showed caseous deposits in the pyramids and some pyelitis. There was no evidence of extension of the inflammation from the tympanum. Mr. Marten said the case was of interest from a medico-legal point of view, as it was difficult to determine to what extent the blow was the cause of death. Fortunately the meningitis proved to be tubercular, and a verdict of death from natural causes was returned.

Exostosis of Great Toe.—Mr. WALLIS showed this specimen, removed from a woman aged thirty-three. It had been growing for fifteen years, and had caused great pain. The whole of the last phalanx was removed. The growth sprung from the knotty terminal part of the phalanx, and not the epiphysis, and was covered with cartilage.

MIDLAND MEDICAL SOCIETY.

A MEETING of the above Society was held on Wednesday, Feb. 3rd, the President, Dr. Holmes Joy, in the chair.

Healed Phthisical Cavity.—Dr. FOXWELL showed a case of Healed Phthisical Cavity in a man who had been in the General Hospital under his care for repeated hæmoptysis, continuous pyrexia, and considerable excavation at the right apex some months previously, and who had now for two months done his work as a commercial traveller's porter. At present there were no signs by which the existence of a cavity could with certainty be diagnosed, owing to the amount of fibrotic contraction, nor was there any indication of progressive disease.

Anæsthesia of Hand. — Dr. SUCKLING showed a man who had been under his care suffering from complete Anæsthesia of the Left Hand. Ten months previously, in lifting an 18-gallon can of milk with a fellow porter, his assistant dropped the can, and the patient suffered a severe strain of the arm; anæsthesia and paresis of the hand immediately followed. There was no trophic or electrical change, and the only symptom that might have indicated actual injury to the roots of the brachial plexus was a slight dilatation of the left pupil, which might have been due to irritation of the root of the first dorsal nerve. Dr. Suckling concluded that the case was one of functional hyperæsthesia, and probably due to hypochondriasis, the man seeming depressed. The functional nature of the affection was proved by his rapid recovery after faradisation, and by the fact that if, when blindfolded, a mark was made some distance below the line where he said he could feel, when the bandage was taken off, he always felt down to this mark, so that a daily diminution of the area of anæsthesia was produced by deceiving him in this manner.

Antipyrin. — Dr. SAUNDBY exhibited the temperature charts of two cases of pneumonia and two cases of enteric fever created by Antipyrin. The temperature had been taken simultaneously in the rectum and axilla, and the result showed that the curves were almost completely parallel. Exceptionally, a slight fall in the axilla was accompanied by no fall or even a slight rise in the rectum, but the general course of the temperature was the same in both places. The observations were made in some cases every hour, in others every two hours. Dr. Saundby referred to a paragraph in THE LANCET where Professor Jaccoud was made to assert his disbelief in the utility of antipyrin, on the ground of its heat-reducing effect being solely peripheral, the rectal temperature remaining the same, or even rising, while the axillary temperature fell. He believed these charts disproved that assertion, and were evidence of the powerful antipyretic effects of this drug.

Flat-foot.—Mr. BARLING showed a youth on whom he had operated for Flat-foot. The deformity had arisen after acute rheumatism three years previously, and was of the most severe kind, especially on the right side. The left foot was treated by forcible manipulation, the right by Ogston's operation, as the enlargement of the tubercle of the right scaphoid prevented restoration of the arch until it was mostly removed. The arch of each foot is now excellent as far as appearances go, and the patient can walk some miles without distress; but although there appears to be bony ankylosis on the right side, yet that is, from the patient's statement, the weaker foot. It is important, however, to remember that it was the worst before treatment.

A meeting was also held on Wednesday, Feb. 17th.

Cyst of Parovarium.—Mr. TAYLOR showed a Papillomatous Cyst of the Parovarium which had been successfully removed by abdominal section. The patient was also suffering from uterine myoma and protrusion of the cervix uteri from the vaginal orifice. Since the operation no protrusion has occurred, showing that this was due in great measure to the weight of the tumour which was removed. Twisting of the pedicle and the rapid development of a blood-cyst below the original tumour occurred shortly before operation, and the case forms a good example of those complicated ones which almost defy classification. The appendages on both sides were removed. Mr. Taylor also showed a specimen and drawings of multiple minute cysts or vesicles of the broad ligament from a case operated on by Mr. Tait. This was a very rare condition, and he did not believe that any similar case had been described. He thought it possible that the case might be one of herpes of the broad ligament.

Hemilateral Myelitis.—Dr. SUCKLING showed a man who had been under his care for Acute Hemilateral Myelitis due to Syphilis. The patient was now able to walk, but complained of weakness of the left leg and of numbness of the right. Dr. Suckling had carefully investigated the muscular sense, and found that it was defective on the side of the lesion, the patient being able to distinguish between half-ounce and quarter-ounce weights on the right side, but not on the left. In this case Brown Séquard's dictum, which Dr. Ferrier had recently opposed, was confirmed. The case had been fully reported in the *Birmingham Medical Review* for August, 1885.

Mr. CHAVASSE showed the Stomach and Œsophagus from a case of Gastrostomy; a Vesical Calculus, weighing 5½ oz., that he had successfully removed from a man aged twenty-one by lateral lithotomy; and half an Inferior Maxilla from which a spindle-celled sarcoma was growing: this was removed from a man aged forty. During the operation the larynx became blocked with thickened mucoid discharge, and tracheotomy was performed to relieve the dyspnœa. The patient at the present time is doing well.

Mr. WALTER FOWLER showed a youth on whom he had performed a partial excision of the wrist for disease.

Dr. FOXWELL read a paper on Acute Laryngitis in Children.

Reviews and Notices of Books.

BACTERIOLOGY.

1. *Researches on Bacteria in the Blood* (*Untersuchungen über Spaltpilze im menschlichen Blute*). Von Dr. G. V. HOFFMANN. Pp. 82. Berlin: Hirschwald. 1884.
2. *The Schizomycetes* (*Die Spaltpilze*). Von Dr. W. ZOPF, Dritte Auflage. Pp. 127. Breslau: Ed. Trewendt. 1885.
3. *The Mycetozoa or Myxomycetes* (*Die Pilzthiere oder Schleimpilze*). Von Dr. W. ZOPF. Pp. 174. Breslau: Ed. Trewendt. 1885.
4. *Zymotic Sketches: Fermentation-fungi and Disease-fungi* (*Zymotische Skizzen - Gährungspilze - Krankheitspilze*). Pp. 600. Von. Dr. M. VOGEL. Hamburg: J. F. Richter. 1885.
5. *Pathogenic Microbes* (*Les Microbes Pathogènes*). Par le Dr. C. ARTIGLAS. Première Fascicule. Pp. 260. Paris: G. Masson. 1885.
6. *Bacterial Etiology of Infectious Diseases* (*Die Bakterien-Ætiologie der Infections-Krankheiten*). Von Dr. HUGO MITTENZWEIG. Pp. 135. Berlin: Hirschwald. 1885.
7. *Microbic Doctrine of Yellow Fever and its Preventive Inoculations* (*Doctrine Microbienne de la Fièvre Jaune et ses Inoculations préventives*). Par le Dr. DOMINGO FREIRE. Pp. 451. Rio Janiero: Imprimerie Nationale. 1885.
8. *Bacteria in Erysipelas* (*Des Bactéries dans l'Erysipèle*). Par le Dr. G. NEPVEU. Pp. 8. Paris: Larousse. 1885.
9. *Study of the Pathogeny and Pathological Anatomy of Erysipelas* (*Etude sur le Pathogénie et l'Anatomie Pathologique de l'Erysipèle*). Par le Dr. M. DENUCÉ. Pp. 165. Paris: Steinheil. 1885.

THE literature of bacteriology grows apace, for the very nature of the subject is favourable to many extravagant theories, as well as much imperfect observation. The essays and monographs which form the subject of this notice are, indeed, of most unequal merit, but they illustrate fairly well some of the facts and fallacies that surround the question. Thus Hoffmann's *brochure* (1) is written to establish a fact, hitherto denied by the majority of competent observers, that normal human blood contains an abundant quantity of micro-organisms, which under appropriate conditions may assume pathogenic properties. Where

others see only "granular matter" the writer sees living cocci and bacteria, and is clearly of opinion that the species may be transmuted, and even developed, into higher forms of fungi altogether. The two works of Dr. Zopf (2 and 3), dealing respectively with the bacteria and the mycetozoa, are of a different class. Forming contributions to the "Encyclopædie der Naturwissenschaften," they comprise a valuable systematic synopsis of these lowly forms of vegetable life, and are treated on a strictly botanical plan. To take the work dealing with the schizomycetes (spaltpilze) as an example: It opens with chapters upon morphology, on spore production and zooglœa formation, on physiology, including the nutrition of these organisms, their action upon surrounding media, and the influence upon them of physical and chemical agents; then the methods for their investigation are described; and, finally, the characters of each species are fully detailed. It may be interesting to quote the classification adopted. Ord. 1: Coccaceæ. Gen.: Streptococcus, Merismopedia, Sarcina, Micrococcus, Ascococcus. Ord. 2: Bacteriaceæ. Gen.: Bacterium, Spirillum, Leuconostoc, Bacillus, Vibrio, Clostridium. Ord. 3: Leptotricheæ. Gen.: Crinothrix, Beggiatoa, Phragmidiothrix, Leptothrix. Ord. 4: Cladotricheæ. Gen.: Cladothrix. Dr. Zopf is admitted as an authority on the subject, and he has certainly done much to systematise the knowledge hitherto gained upon the great variety of these minute forms of life, many of which play a large part in the etiology of disease. To pass from such writings to the rather voluminous book of Dr. Vogel (4) is to leave the firm ground of science to enter upon the most treacherous and insecure footing of speculation. The intention of the writer has been the praiseworthy one to harmonise the processes of disease with those observed in fermentation outside the body; but every page is full of the most extraordinary propositions and extravagant theories. He seems to believe that the bacterial groups are directly derived from the higher fungi, and describes and figures from various morbid secretions and products forms and structures the like of which have not, we venture to think, been met with before. It is inevitable, we fear, that the zymotic theory should lead to such absolutely erroneous work; but we could hardly have deemed it possible that any competent microscopist could have seen the things here described, or having seen them could have drawn such conclusions from his observations.

The lectures of Dr. Artigias (5) were delivered in the Bordeaux Faculty of Medicine. They do not contain much that is novel, but are fairly accurate in the descriptions they contain of the recent work upon tuberculosis and pneumonia. For these two subjects occupy the major part of the book; one lecture, also, being devoted to actinomycosis, and a few others to generalities upon microbes, their investigation and relation to infective diseases. The bacillus tuberculosis of Koch is regarded as the same organism as the coccus described by Toussaint and the zooglœa of Malassez and Vignal—a variable morphology being not considered at all opposed to general conceptions of bacterial growth. It is asserted, also, that the pneumonococcus appears under various forms, and a contrast is drawn between the action upon the human organism of the tubercular microbe and the pneumonic. The subject of the nature of pneumonia, which precedes a description of its special microbe introduces the reader to the now well-worn historical facts pertaining to the epidemic occurrence and contagious manifestation of the disease. We cannot say that the lectures are profound, or that they are original; whilst some of the illustrations of apparatus, &c., might certainly have been more artistically rendered.

Far more satisfactory is the compilation of Dr. Mittenzweig (6), which comprises within a limited compass most of the essential facts concerning the pathogenic bacteria. There are chapters upon morphology, cultivation, inoculation, and the relation of bacteria to disease. It is pointed out that Naegele and Zopf are the chief supporters of the view of the mutability of species; Koch of their constancy; whilst Buchner holds a position on this question midway between the two opposing camps. The writer thinks that Koch's view is the most feasible; whereas, as we all know, many ingenious arguments to the contrary have been based on the occurrence of transitional and mixed types of specific disease. A clear distinction is drawn between the saprophytic and pathogenic bacteria; and the mode of operation of the latter upon the body is also well stated—viz., the general disturbance produced by ptomaines and the local disorders—as in erysipelas and diphtheria, typhoid fever, and tuberculosis, set up by the actual growth of the micro-organism. Sanitation and treatment based on the bacterial hypothesis are also discussed, and a brief description is given of each of the proved pathogenic organisms, a somewhat disproportionate allowance being accorded to the subject of cholera.

It is somewhat difficult to assign its proper value to the bulky and elaborately illustrated work of Dr. Domingo Freire (7). It constitutes a report to the Government of Brazil, and merits much praise for the evidence given of much patient and diligent labour in the endeavour to solve the problem of yellow fever, and suggest measures for its prophylaxis. Dr. Freire claims to have discovered the cause of this terribly fatal disease, and to have established a means of preventive inoculation. The discovery requires, however, to be verified, and, if we may judge from the evidence in its support adduced in the pages of this work, we should fear that the verification will be lacking. For in spite of the numerous descriptions and frequent illustrations given of the "cryptococcus xanthogenicus," it is difficult to see in it any very striking or distinctive characters. It is declared to occur in various stages of development, and to form cellular bodies containing pigment and spores, to multiply with great rapidity, and to be detected in large numbers in the blood and tissues, in the substance of organs, in the black vomit of the disease, in the bile, and in the urine. In this ubiquity it may claim to rank higher than any known pathogenic organism. It is aerobic and lives at the expense of the blood-globules and albuminoids of the body. Again, the cultures which Dr. Freire produced in milk, broth, gelatine, potato, and earth, are described as forming black masses, which certainly have characters not resembling the cultivations of any other known microbe. Its inoculation into animals is followed by rapidly fatal results and a reproduction of the micro-organism in the animal's body; and it is found in large amount in the hospital wards devoted to yellow fever cases and in the earth of the burying-grounds that receive the bodies of those who have died of the disease. All this and more is stated, so that the reader may be persuaded that the discovery is a reality; and yet there is, it seems to us, a lack of the precision of statement and clear definite enunciation of fact which are so necessary in establishing the truth of a question of this kind. However, acting upon the facts he has obtained, Dr. Freire obtained permission to practise preventive inoculations by means of the attenuated virus; and he not only details his method, but gives a list of the persons of all nationalities who were subjected to the practice. Certainly they show a remarkable immunity from the disease to which they were exposed during the epidemic of 1883-84; but in spite of these facts, it is better to withhold judgment until, as we have said, the facts and conclusions can be controlled and verified by other authorities. The volume is also rich in details of the pathological anatomy of yellow fever and of some of its clinical phenomena, and had it been written in a less diffuse style

it would be an even more valuable contribution to literature than it is.

Dr. Nepveu's *brochure* (8) is a reprint of a paper written in 1870, and the object of its republication has doubtless been to show that more than ten years before Fehleisen's discovery, Nepveu had observed bacteria in the blood in erysipelas. The paper consists of a brief account of the examination of the blood in a few cases of this disease, the organism being described as the *bacterium punctum* of Ehrenberg; it was found in greatest abundance in blood drawn from the vicinity of the cutaneous inflammation.

Dr. Denucé (9) reviews at length the pathological anatomy of erysipelas in a manner which shows much diligence in historical and literary research, as well as evidence of skill in personal observation. Briefly he confirms the facts obtained by Fehleisen—viz., that the organism of erysipelas is a *streptococcus* which occurs in groups in the dermal connective tissue spaces, in the lymphatics, and in the subcutaneous tissue. He reminds us that its specific nature has been proved by the crucial test of human inoculation; in one case (inoculated by Jariche) of cancer of the breast the experiment was unfortunately fatal. Proofs are given that the secondary lesions of erysipelas may be assigned to the invasion of the blood by the micro-organism.

The Anatomy of the Intestinal Canal and Peritoneum in Man. By FREDERICK TREVES, F.R.C.S., Hunterian Professor at the Royal College of Surgeons of England, Surgeon to and Lecturer on Anatomy at the London Hospital. London: H. K. Lewis. 1885.

THIS is a reprint of Mr. Treves' Hunterian Lectures delivered at the Royal College of Surgeons last year, and which have already been published in another form. The lectures are founded upon the result of the careful examination of 100 consecutive subjects undertaken before any changes from decomposition had occurred, compared in many instances with the conditions found in some of the lower animals. Mr. Treves has succeeded in elucidating some obscure points; such, for instance, as the fossa duodeno-jejunalis, its formation and its relation to retro-peritoneal hernia, and mesenteric holes and mesenteric hernia. The point, perhaps, of most immediate surgical interest is the demonstration that, contrary to the usual teaching of text-books, a meso-colon is more common on the left than the right side in the proportion respectively of 36 and 26 per cent. There is therefore more danger of opening the peritoneum in performing lumbar colotomy on the left side than on the right. Where, however, the disease for which the operation is indicated is undoubtedly seated in the rectum or sigmoid flexure, the operation will continue to be done on the left side rather than the right, so as not to interfere with the function of a greater length of the intestine than is necessary. For the future, however, surgeons will be less fearful of right lumbar colotomy in all cases in which it is clearly indicated, or in which there is a doubt whether a fistulous opening on the left side would meet the requirements of the case. We could wish that these useful lectures had been published in a more convenient form. The quarto size is not suitable for a modern library and for a book of such small dimensions. Rough-edged parchment paper is picturesque, but not convenient to turn over; and it is a great convenience to the reader to have the illustrations, which, in this case, are of great value in explaining the text, intercalated in the text rather than bound up at the end. The illustrations are also rather more roughly executed than is customary in English scientific works.

Minutes of the General Medical Council, of its Executive and Dental Committees, and of its Branch Councils for 1885. Vol. 22. London: Spottiswoode and Co., Grace-church-street, E.C.

THIS volume of the Minutes of the Medical Council is one of more than usual interest. Besides the resolutions of the Medical Council relative to the erasure of the names of several practitioners from the Register and the revision of the recommendations of the Council, it contains very interesting tabular statements as to the visitation of examinations and the various results of the investigations by the Statistical Committee. The seventeen tables included in these investigations are of very great value; they contain information of the time, places, and results of medical study, and of the ratio of medical practitioners to population, which it would be impossible to meet with elsewhere, and which cannot be too deeply studied by all who are interested in the profession, whether in its educational aspects or in its relation to the public wants.

New Inventions.

TRUSS WITH GLYCERINE PAD.

THE new truss for which letters patent have been granted to Messrs. Arnold and Sons, of West Smithfield, appears to be a great improvement on existing trusses. The pad is made of indiarubber and filled with glycerine, which is found after frequent trials and long experience not to

evaporate or escape, always remaining soft and comfortable, and has sufficient resistance to overcome ordinary forms of hernia. The pad, from its peculiar construction, adapts itself better than any other, as it completely closes the external ring without the possibility of enlarging it.

THE COMPOSITION OF HOPEINE.

To the Editor of THE LANCET.

SIR,—A good deal of obloquy having fallen upon the pharmaceutical trade in England in the eyes of our French neighbours, it would be as well if some explanation of the alleged facts in the above matter were afforded. In the *Nouveaux Remèdes* for February, Dr. Bardet, to quote an article in the *Pharmaceutical Journal* for Feb. 13th, "does not hesitate to say that if a fraud has not been practised, as he is inclined to think, it is at least incumbent on Dr. Williamson, as the discoverer of the alkaloid in the hop, to demonstrate the fact of its existence in that plant, and to clear up more thoroughly the remarkable resemblance between hopeine and morphine." It appears that Dr. Bardet purchased at a high price some so-called hopeine of some English manufacturing firms, and on testing the specimens could not find any distinction between them and morphine. M. Petit obtained the same result with other specimens. The language used across the water about this is, to say the least of it, expressive. We learn from the same article in the *Pharmaceutical Journal* that samples of the new alkaloid have been obtained and are now undergoing analysis at the Pharmaceutical Society's laboratory. As this was some weeks ago, by this time some results must have been obtained, and these results ought in justice to be given to the professional public. It is not a nice thing to think about that such an accusation should hang over our manufacturing pharmacists, on whom we as medical men are accustomed to fully rely, without any explanation. Trusting you will not allow this matter to be hushed up.

Yours truly,

March 4th, 1886. SEISMOS.

THE LANCET.

LONDON: SATURDAY, MARCH 13, 1886.

ON Tuesday next in the House of Commons, Mr. STANSFELD will call attention to the Contagious Diseases Acts of 1866 and 1869, and will move, "That, in the opinion of this House, the Contagious Diseases Acts, 1866–1869, ought to be repealed." The whole history of these Acts, from their passing to the present time, has been so fully given in recent issues of THE LANCET, and the question is now reduced to so fine a point, that it is only necessary to recapitulate a few facts, and to show what will be the effects should Mr. STANSFELD'S motion be carried. The question to be decided is, are prostitution and venereal diseases proper subjects for special legislation? Twenty-four years ago a Select Committee of the House of Commons described the state of prostitution at our home, naval, and military stations as "appalling," and pressed on the Government of that day the necessity of at once grappling with the mass of vice, filth, and disease which surrounded the soldiers' barracks and the seamen's homes. The result was the Act of 1864, which, though causing a great reduction of disease, was found to be insufficient, and, after an inquiry by a medical committee extending over nearly two years it was replaced by Mr. CHILDERS' Act of 1866. Select Committees of the Lords in 1868 and Commons in 1869 reported so favourably of this Act and its results that it was followed by the Act of 1869, which considerably enlarged the sphere of its operations and improved the former one in several details. Then arose the opposition to these Acts, which has continued ever since, and an attempt to repeal them in 1870 was defeated by a large majority, the matter being referred to a Royal Commission. The Royal Commissioners, while recommending certain changes, one of which was that the compulsory examinations of women should be discontinued, reported favourably of the Acts, and strongly urged their maintenance. "We attach," they say, "great importance to the maintenance of a system which, if it cannot altogether annul, may at least materially mitigate, a pestilence which is not, like other contagions, of occasional occurrence, but one of perennial growth. The offenders who bring this affliction upon themselves by their own vicious indulgence may have no claim to the compassionate care of the State, but the numerous innocent persons who suffer from the disease are surely entitled to consideration." We venture to express our hope, therefore, that while due consideration is paid to the sentiments of the people in regard to prostitution, no misapprehension as to the real moral bearings of the question, and no want of courage, will be suffered to prevent the application of such remedy as may be practicable to this great evil. The firmness of a former Parliament withstood the storm of clamour with which the discovery of vaccination was assailed by the ignorance and prejudice of the day, and relieved posterity from a scourge which was the terror of earlier generations; and we would fain hope that an attempt to stay the progress of a plague scarcely less formidable in its ravages is not to be hastily abandoned.

In 1871 a memorial in favour of the Acts was signed by 2500 medical practitioners, including, with very few exceptions, all the leading physicians and surgeons, and presented to Lord ABERDARE, then Mr. BRUCE, Home Secretary. Motions for the repeal of the Acts were brought forward in 1873, 1875, and 1876, and defeated by large majorities; in 1878 a similar motion was "talked out," and in 1879 it was met and defeated by the previous question being carried. In the last-mentioned year a Select Committee of the House of Commons was appointed to inquire into the Acts, and whether they should be maintained, amended, extended, or repealed. After an inquiry extending over four years, they reported that the Acts had successfully served the two objects to which they were directed — the diminution of venereal disease and the increased efficiency of the army. In discussing the question of repeal they report:—

"But apart from this consideration, it is most important that Parliament and the country should clearly understand what the simple and absolute repeal of the Acts, including the abolition of police surveillance and of State-aided lock hospitals, would mean in districts where they have been in operation for thirteen years and more. It would mean: (*a*) Full licence for venereal disease of all kinds to disseminate itself, unchecked either by police control or by hospital treatment. (*b*) A serious diminution in the effective strength of our army and navy, which would be especially felt in the event of their services being suddenly called into requisition. (*c*) The relegation of numbers of these unhappy women to the state of hopeless misery, squalor, and disease in which they lived before the system was introduced. (*d*) The letting loose of increased crowds of abandoned and diseased women and girls of all ages upon streets and thoroughfares swarming with soldiers and sailors, with little or no practical check or control over their behaviour. It is scarcely surprising that such a prospect should excite feelings of dismay in the minds of the more intelligent and thoughtful inhabitants of subjected districts."

In 1883 the compulsory examinations of women were abandoned in consequence of a resolution of Mr. STANSFELD to that effect having been carried by what is generally admitted to have been a snatch vote. In consequence of this, the number of admissions into the Government hospitals for females has fallen off 50 per cent., there has been a great increase of disease among both soldiers and seamen, and, in short, all the evils enumerated above have occurred, with this modification—viz., that those women who voluntarily apply at the lock hospitals are admitted and detained there until cured. Should Mr. STANSFELD'S resolution be carried on Tuesday, even this moderate and humane arrangement will have to be abandoned, for without the sanction of Parliament no funds can be obtained wherewith to carry on the lock hospitals, all or any of them, for a single day. It is most important that members of the House of Commons should be well aware of the effect of their votes. All the preceding facts can be verified by reference to the reports indicated, and do not admit either of dispute or modification. It is not now a question of compulsory examinations or of police control, or compulsory admission into hospital. It is a question of common humanity, Are the Government lock

hospitals to be all closed, the unfortunate prostitutes who are now in them to be driven into the streets uncured, and all who may in future apply for admission to be denied? This is the question which each member must ask himself, for on the answer depends whether he will vote for or against Mr. STANSFELD'S motion.

THERE are few practitioners among the middle or upper classes who are not called upon from time to time to advise a consumptive patient regarding the choice of a sanatorium where he may seek restoration to health, or at least escape the gloom and damp of the English winter. The choice is one of the most delicate problems which present themselves to the physician, inasmuch as it involves not only a thoroughly correct estimate of the constitutional peculiarities of the patient and the type of his malady, but also a knowledge of foreign countries, which few have the opportunity of acquiring by travel and personal observation. We think we shall be doing a service to the profession by endeavouring to disseminate a knowledge of some general principles on this question which may now be regarded as almost universally accepted.

First of all, there are many cases where the resort to foreign travel should be resolutely forbidden. Nothing casts greater discredit upon the profession or is more injurious to individual careers than the indiscriminate ordering abroad of all consumptives. Many a one, who might at least have enjoyed a peaceful *euthanasia* amid the comforts of home and surrounded by familiar and sympathetic faces, is cast overboard as a corpse by strange hands, or dies miserably in a foreign lodging-house. Where the malady is far advanced and steadily progressive, where wasting is a very prominent symptom, where there is persistent pyrexia unrelieved by remedies, or where ulceration of the bowels exists, foreign travel is usually quite unavailing, and cannot be honestly recommended. It ought to be very strongly laid down that travel is not admissible as a *dernier ressort*. If reasonable hope of benefit does not exist, it is cruel and culpable to advise a measure which is never indifferent, but either promotes recovery or accelerates the fatal issue. We speak thus strongly not from any want of faith in climatic treatment—of the enormous value of which, when rightly directed, no one can be more profoundly convinced than ourselves,—but because we are keenly conscious of the lamentable discredit which one case of obvious and avoidable failure casts upon an important and hopeful branch of therapeutics.

Having decided that our patient is in a fit state for foreign travel, we have to approach the more difficult question of the selection of a suitable resort. If the patient retains a fair amount of vigour, if free from general bronchitis, cardiac or renal disease, severe digestive disturbance, and serious nervous debility, we think there can be little doubt that the high altitude treatment, as pursued at Davos, St. Moritz, and Samaden in Switzerland, Bogota in the Andes, Manitou springs in Colorado, and elsewhere, affords by far the best prospect of success. Much wasting or persistent pyrexia are, *pro tanto*, contra-indications to this line of treatment, but the essential indication for its adoption is the retention of a fair amount of circulatory and digestive vigour. The patient who has decided to have recourse to the mountains should observe two precautions: first, he should make the journey in two or three stages, so as to become gradually habituated to the novel atmospheric conditions prevailing at high altitudes; and secondly, if he selects a resort where frost and snow prevail, he should remove thither at the end of summer or beginning of autumn, instead of waiting for the advent of winter, in order that he may learn to bear the strain of the aerial rarefaction before being called to add thereto the strain of intense cold. The high altitude treatment has the great advantage of tempting to vigorous out-door exercise and amusement, and thus gradually lures the patient to relinquish his habits of invalidism, which in warm and sedative climates he only learns to hug the more closely. We are still much in need of satisfactory statistics to show beyond cavil the results of treatment at the high stations, but there can be no doubt that much good has been thus effected, and that this line of practice is steadily advancing alike in professional and in public favour.

Of the lowland resorts there are two types—the marine (such as Cannes, Algiers, Malaga, or Madeira) and the inland (such as Cairo, Assouan, Bloemfontein, or the riverine towns of New South Wales). Warmth prevails alike in both, but in the former case we have warmth *plus* humidity, in the latter warmth *plus* a high degree of dryness. Yet individuals vary so much, and the climate of any locality is such an infinitely complex factor, that it is extremely difficult to lay down any rules, even approximately. Some specific indications and contra-indications, however, exist, and it is highly desirable that they should become more widely known. Thus the presence of nervous disturbance—hysteria, neuralgia, sleeplessness—should be an absolute bar to Cannes or Nice; hepatic troubles preclude recourse to Algiers; intestinal derangement is a sign-post that Madeira must be avoided, as there diarrhœa is so prevalent as to be known as the "island complaint." Writers on consumption lay down various rules regarding the sanatoria most adapted to different types of the disease, but those who have had the largest experience of foreign health-resorts will be the most ready to admit that prediction on this subject is still most difficult and uncertain, and that more seems to depend upon the constitutional condition of the patient, his idiosyncrasies of nervous, circulatory, and digestive organisation, than upon the type of his malady, regarding which rules are apt to be arbitrary and so beset by inevitable qualifications as to be practically useless.

Australia has long had a high repute for consumption—a repute which is thoroughly well founded, yet in much danger of being imperilled by ignorance or neglect of one or two fundamental principles. The parts of the great Australian continent suitable for phthisis are the great inland plains, where the climate is singularly dry and equable, intensely hot in summer, but agreeable at other seasons. The littoral is quite unsuited to consumptives, and few worse climates exist for such cases than Melbourne, where extreme and sudden changes of temperature, frequent dust-storms, and open sewers combine to produce a condition of things pernicious in the last degree to the phthisical sufferer. No wonder the Australian practitioners express their astonish-

ment as one shipload of consumptives after another disembarks and settles in Melbourne, there to lose in a few weeks the benefit usually acquired on shipboard and soon to sink into a premature grave. Such patients should not lose a day in departing for the interior, or they may safely cross Bass's Straits and settle in the charming and healthful island of Tasmania.

The Cape is not so popular now as in its palmy days, when it was the half-way house to our great Eastern dependency. Cape Town is all that it should not be in a sanitary sense, and frequent epidemics have from time to time scourged its inhabitants for their neglect of Nature's laws. The suburbs are charming, and possess reasonable accommodation; but the climate is somewhat treacherous, and storms are frequent. The climate of the interior is more equable, and in the main healthful, whilst means of transit and accommodation of all kinds are becoming less primitive and trying to invalids.

One last word regarding health-resorts for phthisis. When the patient has found one to suit him, let him remain there, and neither return home nor rove beyond it; neglect of this rule has brought many a young life to a too early extinction.

THE state of the central nervous system in sleep is a fertile subject for discussion, replete with interest, full of uncertainty, and possessing as much bearing on the welfare of the human race as any other subject that could be named. The cerebral cortex is during healthy sleep in a state of functional inactivity; its nutritive processes are unknown, though it is conjectured that ascending metabolism is at its maximum and descending at its minimum—exactly the reverse of the waking state. What degree of sleep occurs in the nervous centres that lie below the level of the cerebral cortex is also an unknown quantity. During the waking state it is the function of the cerebral cortex to spontaneously originate functions, just as it is for the heart to go on beating or the breathing to continue its undulations. Many of the lower nervous centres during sleep are in a condition of over-activity; this over-activity is not ordinarily manifest, because these lower centres only act as the result of some recognisable excitant. Being such an extensive system and possessing functions so diverse, different parts of the central nervous system may be in very different conditions at one and the same time. The bulk of the cerebral cortex may be inactive whilst some of the centres are still in partial action. We say partial action, because it is probable that complete functional activity of a cortical centre is impossible unless the whole of this region is sensitive. This is the only kind of way in which scientific physiologists can interpret the phenomena of somnambulism, dreaming, ecstasy, and the like. An interesting contribution to the subject has recently appeared from the pen of Dr. LYMAN.[1] "Natural sleep is that condition of physiological repose in which the molecular movements of the brain are no longer fully and clearly projected upon the field of consciousness." This is Dr. LYMAN'S definition. We cannot acquiesce in the statement. We would grant that it is a question of molecular movements, but then it is not said what sort of molecular motion. Clearly during sleep we have two opposite conditions. There is no doubt that functional activity of the brain ceases; in other words, there is loss of consciousness. How incomplete, then, is a definition that asserts that molecular movements are no longer fully and clearly projected upon the field of consciousness. It had better be said that there is no field of consciousness on which molecular movements can be projected. Physiologically, consciousness itself must be regarded in its essence as a form of molecular motion; what it is psychologically we have no means of knowing. Again, the definition is, we believe, incorrect, because, though molecular motion that produces function is in abeyance, it is also indisputable that some molecular motion must be going on in order to regenerate and restore the nutrition of the brain. After a period of repose the brain is able to continue working for a very much longer time than would be possible (without deterioration) if it had previously been in action. It may be conceded that sleep may vary in depth but in health the degree of "dissolution" of the cerebral functions should be notified by the absolute abeyance of the highest functions of the brain. There should be no dreaming—no action, in other words, of the visual, auditory, or any other of the higher centres. In somnambulism, which also varies in extent as well as in depth, the phenomena are best explained, not on the assumption of a general depression or dissolution of function taking place equally and in all directions, but by continuance in action of certain tracts of the central and peripheral neuro-muscular system. In somnambulic lethargy, to which Dr. LYMAN devotes a section, we read that this condition represents the form that outwardly resembles profound sleep. In this condition there is a persistent loss of consciousness, and the sleepiness or functional inactivity is of great depth, so that the patient breathes but feebly, and the circulation is reduced to a low ebb; swallowing and other organic functions even participate in the reduction. The chapters on Dreams and Somnambulism and Artificial Somnambulism are well constructed, and contain a large amount of readable information; but the exigencies of our space preclude the further consideration of the subject at present.

[1] Insomnia and other Disorders of Sleep. London: Trübner and Co. 1885.

WHEN commenting on the subject of Lunacy Law Reform in our last issue, it was observed that, "as regards the 'private asylum question,' we think that may be hopefully left to adjust itself, under the influence of a provision that public authorities may—it ought to be *shall*—provide for private needs." The hope is, that when adequate accommodation has been provided for the care and cure of the insane of all social classes in public institutions, there will not be any considerable number of cases in which recourse is had to the private or licensed houses; and in a reasonable time, without any need for the ratepayer to dip his hands further into his pockets than he is at present, unhappily, compelled to dip them for lunacy purposes, private asylums, not being any longer profitable undertakings, will cease to exist. We go further, and hope and believe that the friends of the unsound in mind will for their own protection choose public and official guardians for their patients in preference to private and non-official custodians; so that after the new system comes fully into operation, the bare fact of

desiring to place an alleged lunatic in a private house would give a *primâ facie* appearance of desire for a hole-and-corner procedure in preference to the open-handed way of sending the insane at once in the broad light of day to a public institution.

Meanwhile, it is impossible to hide from view that the method proposed in the new Bill is neither a public-spirited nor a wholly satisfactory one. It is, in truth, an attempt to evade the expenditure of what may well be regarded as an equitable sum in purchase money for the existing asylums. The idea of the private asylum clause is to set up a rival business, conducted by public officials, which it is anticipated will more or less quickly ruin the business of the existing proprietors and lessees of private asylums by drawing away their customers. It would, of course, be far better to go into the market and buy the licensed houses at a fair price. The law has so long sanctioned the private asylum system that it is obviously sharp practice to try to supplant those who have invested money in this enterprise on the faith of a Government monopoly, instead of dealing with them on commercial principles. If, instead of buying up the goodwill and plant of the telegraph companies, the Government had started an opposition business in telegraphy, there would have been a loud and justifiable outcry. Yet this is what the Government proposes to do with regard to the private asylums. If the business of hotel- and lodging-house-keeping for the insane be a profitable enterprise, as we are compelled to believe it is, there can be little doubt that it will prove a paying business in the hands of the public authorities now in charge of county and borough asylums. They will make money by the venture, and the profits that accrue will be available for the reduction of the rates. The very great success of quasi-public institutions—such, for example, as St. Andrew's Hospital, near Northampton—is in itself conclusive as to the advantages which will be gained by grafting this private business on the public business of the local asylums. We have no doubt whatever as to the result. As soon as public asylums take paying patients these institutions will be generally preferred, not only for patients just above the rank of paupers, but for the well-to-do. It is therefore necessary to face the fact that a ruinous blow is being struck at the private asylum system by the measure now before Parliament. Meanwhile, as we have said, it is a foul blow in a commercial sense, and we must protest against it as unfair to the proprietors of, and investors in, licensed houses.

The proper course, beyond all doubt, is to buy up the existing properties; and this might, as we have suggested, be very well done by the creation of guaranteed stock bearing a fixed rate of interest, having a marketable value, and being readily transferable. It is not necessary to make any special call on the rate- or tax-payer. The stock issued, being guaranteed, might be made redeemable at the expiration of a reasonable period. This seems to us the best way of getting over the difficulty. The present conjuncture is not one at which it would be easily practicable to induce the Government or the Legislature to sanction the raising of a large capital sum to buy up the private asylums; but if these were taken over by the State, stock might be issued in payment of the purchase money, and each proprietor would then be able to hold or sell at pleasure, while the bonds, being guaranteed, would be negotiable at fair prices. On public grounds it is most desirable to expedite the substitution of public for private asylums; and if the course we suggest were adopted, there would be no insuperable obstacle to the completion of the necessary change within a few months, or one year at the utmost. When, or before, the Bill now in charge of the Lord Chancellor comes to be submitted to the House of Commons we venture to hope the suggestion we reproduce, and which has been so repeatedly urged in these columns, will receive the attention we think it demands and deserves.

Annotations.

"Ne quid nimis."

THE CEREMONY ON THE EMBANKMENT.

WE understand that His Grace the Archbishop of Canterbury will take part in the ceremony of the laying of the foundation-stone of the new Examination Hall of the Conjoined Colleges by Her Majesty the Queen, on March 24th, and also that the choir from the Chapel Royal, Savoy, are to attend. The details of the ceremony are not yet, we believe, completely elaborated, but we hope to be able to give next week full information as to the way in which it is to be carried out. It is long since the Sovereign has taken an active part on such an occasion; the honour, therefore, conferred on our profession is graciously and peculiarly a marked and flattering one, and we are confident that no efforts will be wanting to make the occasion not only a most notable red-letter day in the annals of English medicine, but that it may be also the means of leaving in these restless and unstable days in the memory of our Queen a pleasurable reminiscence of the loyalty and devotion of those of her subjects who are engaged in the honourable profession of medicine. We are glad to be able to add that there is every prospect that room will be found for the Members as well as the Fellows of the College of Physicians. The Fellows and the Members of the College of Surgeons, their number being so great, will have to abide by "the chance of the die." A very large majority of gentlemen who hold the licence of the College of Physicians are also Members of the College of Surgeons; these will accordingly have, at least, a chance of being present; there are, however, some few who have contented themselves with the L.R.C.P. Lond. May we venture to suggest that, especially as previously to the conjuncture of the two Colleges inducements were offered to them to consider this diploma a complete one, it would be a gracious act to give them some opportunity of being present on an occasion which cannot but afford them considerable and special interest.

MEDICAL REFORM.

THERE seems a disposition in some quarters to try to resuscitate the question of medical reform. No one can be more sensible than we are of the faults and defects of the present state of our medical examining bodies, and still more of the Medical Council, by which they are supposed to be governed and supervised. But we must express our strong opinion against any attempt to deal with these questions at the present moment. To expect any serious attention to be given to them in the present position of parties and of public affairs is to betray a sanguine disposition, which we at least do not possess. Any legislation in present circumstances would be unworthy of the name, and would leave the chief points of medical reform un-

touched. Even the introduction of a few direct representatives of the profession to the Medical Council may be dearly bought. And such would be the case if this one point were gained and every prospect of gaining other points were abandoned. The tension and rivalry of parties paralyse Parliament for dealing with such questions without disappointing all those who are earnest in wishing to see old institutions adapted to existing conditions. Sir Lyon Playfair is no doubt well acquainted with the essential points of medical reform. Further, he is no longer bound in a servile relation to one set of the institutions likely to be affected by legislation. Yet more, he may be credited with having long since escaped from the strange delusion that the overcrowded medical profession does not attract a sufficient number of men to fill the vacancies occasioned by death and other causes. But even so, he cannot manufacture time, or alter the fact that Parliament is absorbed with other questions.

THE AGMINATE AND SOLITARY GLANDS.

THE notion that atrophy even to total disappearance of the Peyerian and solitary glands of the intestine proceeds with advancing age bids fair to be dispelled by a painstaking research which we owe to Adolf Passow (Virch. *Archiv*, 101, Hft. 1). By aid of a very simply devised apparatus, Passow set himself to count the number of follicles and Peyer's patches in the intestine in subjects of all ages dying from various affections; he also calculated the total area occupied by the Peyer's patches, and reckoned the relative proportion this occupied to every 1000 square centimetres of the intestinal surface. He gives a table of forty-five cases so examined, and his calculations and method may best be gathered by citing, with necessary curtailment, one of the observations so tabulated:—"No. 27—a man aged thirty-six, much emaciated, died of phthisis; small intestine measured 789 centim. in length and 7 centim. (mean) in breadth; the highest Peyer's patch was met with at a distance of 140 centim. from the pylorus; number of patches 19; total superficies of patches, 61·85 sq. centim, or 11·29 per 1000 sq. centim. of intestine. There were 24·61 solitary follicles per 25 sq. centim. of intestine, giving a total of 5406 of these glands." In only one case, a female aged forty-nine, the subject of tabes, neither solitary nor agminate glands could be detected. In another case, a man aged twenty-six, there were only 0·5 follicles per 25 sq. centim., or a total of 123 in the whole of the small intestine. But such a small number was exceptional, for only six cases had fewer than 1000, the highest number being 8961 (or 76 per 25 sq. cm.), found in a girl nine years of age; whilst among adults the highest number occurred in a man aged sixty-one—viz., 5760 follicles (or 25·1 per 25 sq. cm.). As a rule the number of follicles increases from the pylorus downwards, but exceptionally the pyloric segment of the duodenum contains more than other portions of the bowel. As to Peyer's patches, variations in number and area occurred within wide limits—e.g., in one case the area occupied per 1000 sq. cm. of intestine was 18 sq. cm., in another 1·9 sq. cm. In one case there were only 6 patches, an infant of nine months; in another 41 patches, a woman of twenty-four years. An old man aged eighty-one presented 15 Peyer's patches, with relative area (per 1000 sq. cm.) of 15·8 sq. cm.; in the same subject there were 12·13 solitary follicles per 25 sq. cm. of intestine, or a total of 2377 well-marked though small glands. By calculating the average superficial dimensions of the intestine in adults and children, and the average proportionate number of solitary follicles, the interesting result appears that whereas the intestinal surface has in adults nearly four times the area that it has in children, the relative number of follicles is precisely reversed. Thus in adults the intestinal superficies averages 5582 sq. cm., in children 1513 sq. cm.—i.e., a ratio of 3·68 : 1; the number of follicles per 25 sq. cm. averages in adults 11·28, in children 45·11—i.e., a ratio of 1 : 4·09. But, on the other hand, there is no definite relation between the period of life in adults and the number or extent of these follicular glands; some of the greatest differences in these respects being seen between subjects of the same age, whilst a young man of twenty-six had no more than an old man of eighty-one. Nor was it found that any constant relationship occurred between the Peyerian glands and the solitary follicles; a deficiency in the one was not accompanied by an excess of the other. Briefly it would appear that these lymphatic structures attain their greatest development in childhood; that with the growth of the body they do not increase; but that remarkable variations occur with respect to their persistence, exceptional degrees of this warranting a belief in a "lymphatic constitution" of the affected subject finally, that total absence of them is phenomenal, but not unknown, and certainly not a necessary concomitant of old age.

BUTTERFLIES IN WINTER.

A TEDIOUS, protracted drive in a carriage on a wintry day, with a bitterly keen wind, and most insufficient clothing! Such were the conditions under which many young ladies, mere girls, by no means too hardily trained, made their *début* into society the other day by Royal introduction. Nor was the occasion much different in this respect from others of the same kind, or, indeed, from other gatherings of less pretentious kinds. Custom has been at work in the same way all through the winter, not at Buckingham Palace, but everywhere, fixing its yoke on every neck, fit or unfit, careless of climate, health, or any consequence—of almost everything, it would seem, except tradition. We will not say that reforms in the way of adaptation to season and sense have given us no sign of their advent. The low bodice—that model of classical and doubtful taste in dress, that tempter of disease too often successful—is giving place to forms of dress more rational and more safe. Hours of assembly are changing slowly, and it is coming to be questioned whether the cold small hours of the morning must be reached before the guests depart. Yet, withal, improvement is slow, and we can only look hopefully for the time when society in every rank, the higher and the lower, will recognise that even such pleasures, to afford the most refined enjoyment, do not demand quite so lavish a sacrifice of more sober considerations.

DEATH-RATE AND SANITATION IN RUSSIA.

A SERIES of admirable articles on vital statistics and the importance of sanitary measures is now appearing in one of the St. Petersburg daily papers, founded on a paper by Dr. Eck. The statistics given are certainly of a nature to set every one in Russia thinking seriously about taking measures to improve them. Thus for the year 1882, which seems to be the last year whose vital statistics are available, the mortality in the ten southern provinces was 2·6 per cent., in the seven eastern provinces 3·9 per cent., in the thirteen middle provinces 6·2 per cent., in the sixteen western provinces 3·1 per cent., and in the fourteen northern provinces 3·7 per cent. After mentioning the various sanitary improvements called for, as drainage of various kinds, a supply of wholesome drinking-water, attention to and regulations about buildings of all descriptions, and the establishment of infectious hospitals, Dr. Eck goes on to say: "There is no need for us to puzzle ourselves how these matters are to be done; England has accomplished so much that we need simply adapt what is ready to our hands to our own circumstances. In Germany, France, Austria, and Italy steps are already being taken in the same direction, and all these

countries take England as their chief model, so that we need not be ashamed to do so too." He then appeals to the economic importance to Russia of a reduction of the mortality. On the principle of example being better than precept, he goes into a long but easily comprehensible calculation of the comparative working value of horses whose ages at death vary; and he then takes the respective death-rates of Russia (35), Germany (27), and England (19), and, by means of a method of computation unusual amongst British statisticians, explains that they show that an Englishman has 53 years of life, while a German has 37, and a Russian 29 only. Reckoning a man's working years to commence at the age of 18, an Englishman has 35 years in which to earn against the Russian's 11, and the latter will probably not save much more in his 11 working years above what it costs him to live than has been already expended upon him during his 18 unproductive years; but an Englishman will have 24 years more in which to go on earning and saving. Again, out of 1000 inhabitants in Russia, only 373, or 37 per cent., are of an age to earn, while in England there are 660, or 66 per cent.; or each individual of working age in Russia has to provide for two non-workers, while in England he has only half a non-worker for whom to be responsible.

RATING OF HOSPITALS.

THE movement for the recognition of the rights of hospitals to continue to enjoy their old exemption from the payment of local and other rates continues. Its last manifestation was a conference of authorities of public charities held at Guy's Hospital on Saturday last under the presidency of the treasurer, Mr. Edward Lushington. There were present, among others, the Earl of Leven and Melville, the Hon. Tatton Egerton, M.P., Major Morgan, Mr. O. V. Morgan, M.P., Sir Henry Peek, Professor Leone Levi, Colonel Hamilton, M.P., and many other members of Parliament. Various resolutions were passed, including one pledging the meeting to support a Bill to be introduced into Parliament to restore the old exemption of public charities. The arguments on this subject, as regards hospitals, are certainly all on one side, and the very least the State can do in the present impecunious condition of these institutions is to pass the Bill. Hospitals save the money of the taxpayers both by providing for the poor when sick, and by hastening their restoration to health. All other countries endow their hospitals. The least we can do is not to tax our own.

ACTION UNDER THE CHOLERA ORDER IN THE PORT OF LIVERPOOL.

As many as 20,894 vessels entered the port of Liverpool in 1885, and of these 4078 were submitted to inspection, with the result that 205 were found to be in a defective sanitary condition. The German, Belgian, Dutch, Swedish, and Norwegian vessels are those which, belonging to foreign nations, are best kept; and the Liverpool owned vessels are, as a rule, in very good condition, and so also are most of the English ships. Indeed, the systematic inspection of vessels in English ports and the requirements of the port authorities are having a most beneficial influence on shipping entering our ports. Three vessels were during the year dealt with under the Cholera Order. The *Mayo* was from Carthagena, and a man sick of diarrhœa was on board; but after medical inspection the vessel was released. In a similar way the *Donati* from Barcelona was allowed to enter the port. The third was the *Cartagena*. After leaving Marseilles on August 8th, she started for Oran; but the whole crew, engineers and officers, becoming affected with diarrhœa, she had to put back, two of the crew dying on the return journey, and two others being received into the Marseilles hospital. On August 26th she sailed for Carthagena, and, having taken water and provisions on board, she left there on Sept. 11th. Two of the crew were taken ill on Sept. 13th, another could not work, and several members of the crew were from time to time attacked with diarrhœa and colic. On arrival at Liverpool fresh water and provisions were sent on board, two of the crew were received into the port hospital at New Ferry, and then the vessel was released. Dr. Taylor points out the fact that, as in the case of the *Saint Dunstan* in 1884, the diminution in the general prevalence of diarrhœa and uneasiness in the bowels and the rapid recovery of the sick were remarkable on the vessels being supplied with fresh water. The importation of small-pox from Canada by means of shipping also gave rise to much increased activity during the later months of the year, and a number of patients were received into the City small-pox hospital, the vessels undergoing disinfection.

THE COLD WEATHER AND THE DEATH-RATE.

THE last weekly return of the Registrar-General shows that during the week ending last Saturday the annual death-rate in the twenty-eight large English towns, having an estimated aggregate population of rather more than 9,000,000, was equal to 26·6 per 1000. In London the rate was 26·9, and in the twenty-seven provincial towns it was 26·2. Taking the last four weeks, in which the fatal effect of the recent cold weather has been most marked, the variations in the mean death-rates in the various towns have been very wide. While the mean rate in these four weeks was 24·6 in the twenty-eight towns, it was only 17·6 in Leicester, 18·7 in Hull, and 19·9 in Sheffield; whereas it ranged upwards in the other towns to 28·4 in Preston, 28·5 in Plymouth, 30·0 in Manchester, and 32·7 in Blackburn. The rate in London during the same four weeks was 25·6, and only slightly above the average in the twenty-eight towns. The cold weather during February, to which this great, though unequal, rise in the death-rate has been due, was quite exceptional. The mean temperature at the Royal Observatory, Greenwich, for the month was only 33·7° F., and 4·8° below the mean temperature for the month in 100 years. It is more than thirty years since we have experienced so cold a February; in 1853 the mean temperature of that month was 33·3°, and in the memorable frost of 1855 the month's temperature was so low as 29·4°. The recent death-rate, bearing in mind the low temperature, affords very favourable comparison with the rates that prevailed in the corresponding periods of several recent years in which the mean temperature was much higher. It is worthy of note that during the first nine weeks of this year the deaths referred to diseases of the respiratory organs in London have only exceeded the corrected average in the ten preceding years by 127; in the first six weeks of the year they were 446 below this average; while the excess in the three weeks ending last Saturday was 573.

THE ANATOMY OF THE LUNG.

THE capillary network of the pulmonary alveoli, the respiratory network, whose vessels are scarcely large enough to allow of the passage of the red blood-discs, and whose meshes are almost extinguished during congestion, forms an immense mantle of blood of the thickness of a red blood-corpuscle, and having a superficies, according to Küss, of 150 square metres, representing about two litres of blood. Not knowing by what method Küss had arrived at this estimate, M. Marc Sée has, by an elaborate calculation, endeavoured to ascertain for himself the correctness of Küss's assertion. A brief note in the *Union Médicale*, No. 27, describes the method Sée adopted, and also the result obtained, which was 130 to 135 square metres, or nearly the same as that of Küss.

SCOTTISH HOSPITALS AND THEIR MEANS OF SUPPORT.

A VERY instructive and thoughtful account of the work of the Scottish hospitals, and the way in which they are supported, appears in the *Glasgow Herald* of March 3rd. Like English hospitals, they suffer from impecuniosity; and the chief interest of the article is in its discussion of the ways in which the several items of income might be raised so as to balance the expenditure. Of the twenty-two general hospitals of Scotland four are endowed, so that only eighteen depend solely on voluntary subscriptions. In 1885 they treated 24,668 in-door patients and 118,538 out-door or dispensary cases. The ordinary expenditure was £115,616, or, applying the whole cost to in-door cases, £4 13*s.* 9*d.* for each patient, as against over £8 in English hospitals. The total *ordinary* income is £95,001, made up of the following items: interest from investments, £22,986; students' fees, £5612; payments for patients' board and treatment, £4014; total contributions and donations for maintenance (about 4*d.* per head of the entire population), £62,389. The *extraordinary* income, on the other hand, consisting principally of legacies and special donations, was £56,767, from which has to be deducted not only £18,156 of extraordinary expenditure, but the £20,615 deficit in the ordinary income and expenditure account. As to the ways in which this regular annual deficit is to be made up. The proposal to put hospitals as a burden on the rates is ably discussed and wisely rejected, as tending to pauperise the people, to dry up the springs of charity, and to fall most heavily on those classes of taxpayers least able to bear it. If any departure from the voluntary system is to be adopted, the writer would prefer a grant from the imperial exchequer, giving no impression to local feeling of a *right* to use the hospitals for common purposes. An extra penny on wine and spirits, he thinks, for this purpose would do no harm. But he holds that voluntary system has not failed, and that with a little more care and trouble it can be developed so as to raise contributions from subscribers, from the working classes, and from churches.

LEAD-POISONING.

DR. SINCLAIR WHITE, the medical officer of health for Sheffield, has recently published an excellent and interesting report on the action of the Sheffield water on the lead communication-pipe and its effects on the health of the community. A number of cases of chronic lead-poisoning occurred during last year amongst persons not engaged in any of the trades in which lead is used, analysis showing that the drinking-water in every case contained a sufficient amount of lead to account for the poisoning. An examination of the water-supply led to the fact becoming known that the water of only some parts of the town contained lead to any appreciable extent. Sheffield derives its water from two distinct sources, with separate systems of distribution; the first is from the hills around Redmires, which is collected in reservoirs near its origin, and runs in a conduit to a reservoir at Crooke, known as Hadfield Reservoir, whence it is distributed to certain high-lying districts; the other source is from the hills around Strines and Agden, which runs in a conduit to a reservoir known as Godfrey Reservoir, and is thence distributed to the two low-lying parts of the town. The persons who suffered from lead-poisoning resided in the high-lying districts. The Redmires water is collected from moorland, the surface peat varying in thickness from a few inches to several feet, and beneath this are shale and millstone grit of the carboniferous system of rocks; both the peat and shale contain iron pyrites, and the water was distinctly acid in reaction, the acidity being most intense in the higher portion of the collecting grounds. The Strines and Agden water was not acid. The cause of the acidity in the Redmires water was the subject of careful investigation, and it was found possible that this had resulted, firstly, from the action of soft water on the iron pyrites, giving originto free sulphuric acid; secondly, from ulmic and humic acids, which are caused by the decomposition of vegetable substances; thirdly, from the atmosphere, which contains large quantities of sulphurous acid, the result of the large consumption of coal in the town. Assuming that the first two possible causes had been in force, the impregnation of the Redmires water is explained on the ground that this neighbourhood contains iron pyrites, while the water from Strines and Agden, from containing more alumina, which would neutralise the acid, would give less evidence of the presence of free acid. A further analysis of water taken from sources where the water had passed through new and old lead pipes showed that the former contained a much larger amount of lead than the latter, the former containing from 0·14 to 0·61 grain per gallon, whereas the latter contained from 0·14 to 0·42 grain per gallon. Again, long pipes led to greater pollution of the water than short ones, and the length of time the water had stood in the pipes was also directly related to the amount of lead contained. The report ends with a statement of the results of filtration: carbon and spongy iron filters removing all traces of lead. Dr. White deserves much credit for a painstaking piece of work. His report will be read with much interest by all concerned in public health administration.

A MYSTERY EXPLAINED.

A CURIOUS tale reaches us from Rochester, U.S., illustrating the belief held by some that there is mysterious sympathy between the individual and detached portions of his anatomy, or as the Americans would term it his "physical economy. It is related that a woman who had recently suffered amputation of the foot experienced acute pain in a corn on one of the toes—a fact the like of which often enough comes under the observation of the surgeon, and which, though marvellous to the patient, is easily explained on physiological grounds, for the irritation of sensory fibres of a divided nerve is *referred* to the terminal distribution of those fibres. But the most curious part of the story tells how that on disinterment of the foot a bandage was found tightly embracing the toe on which there had been a painful corn, and how that on the loosening of the fillet the quondam possessor of the foot gained complete relief from her distressing symptom. It may readily be imagined with what wonderment the woman contemplated "the spiritual link" which held in union her greater self and her far-removed extremity, without dreaming of what explanation on a more material basis of the phenomenon in question might be forthcoming. Granted the truth of the principle of "referred pain," as stated above, one need only suppose a coincidence of two altogether unconnected events—the cessation of the pain and the removal of the bandage—to explain the apparent association. But there is another element which should not be disregarded, which may have played an important *rôle* in delivering the woman from her suffering—namely, a psychical state, whether of expectancy or belief; or, on the other hand, mere emotion independent of the mind. It is well known how fear inhibits pain—e.g., most people must have experienced a diminution or cessation of toothache when brought within a measurable distance of the dentist's forceps; and yet, for all that, the physical basis of the pain can scarcely be supposed to have been withdrawn. In the case under consideration, the patient had been wont to associate the painful corn with tight pressure or other form of mechanical injury, and to feel relief on the withdrawal of the source of irritation. What more likely than that, on

learning how the enshrouded foot was "cramped" and "in an uneasy position," she should attribute the pain she now felt to its former cause, and, conversely, the deliverance from pain to the removal of the bandage. These are matters which in the uneducated nurture an innate tendency to superstition, but which to those having a knowledge of the physiology of the nervous system are only illustrations of the manifold ways in which mystery is uncloaked.

LAUDANUM-TIPPLING.

ACCORDING to Dr. O'Hanlon, medical officer to the Spennymoor Local Board, opium-drinking is prevalent to a surprising extent among women in the north of England. The possible ill-effects of the drug on the suckled infants of such women are obvious. Miners' wives appear to be most addicted to the habit, which is by its mode of exercise rendered only the more attractive, insidious, and doubly dangerous in its after injurious effects. The opium is drunk dissolved in proof spirit. These disclosures, as is well known, do not mark a new departure in the use of poisons. They are novel only as proving the extension of an old evil already noted as existing in some degree in every order of society. They inform us, moreover, of a combination of two pernicious practices, drinking and drugging. Experience has shown how hard it is for any governing body to control the abuse of alcohol, and it may be doubted how far the Legislature should proceed in this direction. In the absence of any such remedy, temperance education and agitation have already accomplished much by means of spontaneous effort. The case with regard to opium is different. While the beginnings of its action and ascendancy are in many cases less glaringly hurtful in the public view, and therefore, perhaps, less demonstrable by argument, its final effects on the system are at least equal to the results of drunkenness. Moreover, we are dealing from the first with a drug in the strict sense, a deadly poison, and a medicine, which has no legitimate use for any but a remedial purpose. It is clearly, therefore, within the power and duty of the common law to deny to the public, whether salesmen or buyers, their usurped discretion in treating this substance as a domestic commodity. The weakness of the Poisons Act is generally admitted, and in nothing perhaps is it more apparent than in these most recent proofs of its deficiency.

UNUSUAL RASH AFTER SCARLATINA.

THE report of a case of scarlatina followed by a secondary ambiguous rash on the fourteenth day, in THE LANCET of March 6th, by Dr. Julius Pollock, will be a source of consolation to those practitioners who have from time to time found themselves puzzled and unable to define and name those curious cases of septic infection of the throat in which an ambiguous rash is a common feature. Whenever the throat is the seat of an acute inflammatory affection, there appears to be a disposition to the absorption of, and impregnation of the blood by, some fermentive poison. If the case reported by Dr. Pollock is viewed apart from the attack of scarlatina, it becomes one of sore-throat followed by infiltration of the glands of the neck, irritation of the mucous membrane of the urinary tract, and impregnation of the skin to the production of rash, and, finally, septic thrombosis of the femoral vein. This group of symptoms is now and then seen in the surgical wards in cases of pyæmia. The rash varies from one resembling scarlatina, as best seen in surgical scarlatina, to another resembling measles; sometimes it is more in the nature of the first stage of an attack of acute herpes, but differs from herpes in not going on to the vesicular stage; or it may, like Dr. Pollock's case, resemble the non-scaly stage of psoriasis. In fact, the form of rash is very variable and often very transient, being seen one day and absent the next, with liability to recur. The copper colour of the rash to which Dr. Pollock refers is unusual in a strictly septic eruption, nor is it common for the rash to remain out so long as in this case. When a consultation between such accomplished men as Dr. Julius Pollock, Dr. Samuel Gee, and Mr. George Pollock leaves the exact nature of the disease undefined, it indicates an unexplored field for future clinical investigation by practitioners who see most of these diseases in family practice. Our readers will be interested in, and may be able to assist in answering, the questions raised at the end of the report of Dr. Pollock's interesting case of unusual secondary rash after scarlatina.

CHEAP NUTRITIOUS VEGETABLE FOOD.

AT a time when food is plentiful, but work and wages scarce, a timely hint on dietetics may be of service. The pecuniary advantage of a vegetable diet sufficient for the maintenance of healthy nutrition has been pleaded by a correspondent, and the subject is one deserving of consideration. Something may be said, indeed, on physiological grounds in support of such a diet. While the more easy and perfect assimilation by man of certain substances, especially of nitrogen, when derived from animal rather than vegetable tissue, must influence us in favour of a mixed diet wherever possible, there is no doubt that the human body can be maintained in vigour and efficiency on food from which meat is excluded, if enough of it be taken. The rural population, even in our own days, sustain themselves largely on this principle. Might not many of those who people "starving London," and other of our cities in a similar condition, benefit by adopting the same regimen? There are some, at all events, of the unemployed whose poverty does not prevent their acting thus. Meat and fish may not, perhaps, be purchasable even for one meal; yet enough oatmeal, flour, or pease-flour, might be had, at a less cost, to furnish food for several such. Beef-suet can be had for a trifle, as also can bones, and these will add considerably both in flavour and nutriment to the value of the farinaceous materials. The simplest cookery, if thorough, will make an excellent dish of any of these ingredients. The cheapness of such fare should not be allowed to discredit its utility. There is, we are told, and we partly believe it, some such tendency among the poor. Never has it been less justifiable; and we venture to hope that many who are now in straits, though not quite destitute, may be induced by these remarks to think well of provisions which are exceedingly cheap, and are yet esteemed in their plainest form by not a few in wealthier circumstances.

DESTRUCTION OF REFUSE IN KENSINGTON.

A GOOD deal of opposition has been raised to the proposal of the Kensington vestry to destroy their house and trade refuse from the north part of the parish by means of one of Fryer's destructors to be erected on a piece of land formerly forming brickfields. The opposition was based on the grounds of nuisance and injury to trade. As regards nuisance it is somewhat difficult to speak from experience, because few of the destructors in use limit their work to dealing with such comparatively innocuous substances as the house and trade refuse of Kensington will be; thus in some towns excreta, the contents of pail-closets, and sludge from manure works are also so dealt with. But we are bound to say that, even under those circumstances, it is astonishing how little nuisance is created, and such nuisance as exists is rather dependent on the site on which the destructor is erected being turned into a depôt for the various forms of filth and refuse to be dealt with, than on the mere destruction of the materials concerned. If the destructor in

Kensington be constructed as proposed, and if, to avoid accumulations of refuse, it be kept burning, as is intended, both day and night, we doubt whether any noteworthy nuisance will arise. So far as injury to business is concerned, it appears to be laundry work that is most in question; and unless the laundresses themselves succeed in convincing the public that clothes sent to them to be washed are likely to suffer by reason of the refuse works, no one will trouble his head about the destructor on these grounds. It is necessarily unpleasant to have a refuse destructor as a near neighbour, especially when the alternative is an open recreation-ground, and to this extent we are fully in accord with the complainants; but under existing conditions the destruction of refuse is becoming every year more and more necessary, and sites for destructors must be found.

LONDON HOSPITAL MEDICAL COLLEGE.

ON Tuesday last the corner-stone of the new buildings connected with this College was laid by Mrs. William James Thompson, the wife of the Chairman of the College Board. Among those present were the Chairman of the Hospital (General Keating, V.C., C.S.I.), Sir Wm. Rose Robinson, K.C.S.I., General Nicolson, C.B., the members of the hospital staff, and other friends of the hospital. The usual bottle deposited in the stone contained a copy of THE LANCET, the prospectus of the college, a scroll signed by the members of the staff and of the house committee, and the customary collection of coins. The new buildings practically represent an entirely new college for the London Hospital. Of the old college little now remains, nothing, indeed, except the chemical laboratory and theatre. The new erection will afford ample accommodation for the rapidly increasing number of students, will provide a new museum and lecture theatres, a new dissecting-room, a very spacious library, and a series of rooms—dining, smoking, cloak-rooms, &c.—which will be devoted to the "Club" for students connected with the hospital. Not the least important of the additions to the college is a series of small rooms for small classes and for special demonstrations.

AMBROISE PARE.

MALGAIGNE'S historical and biographical introduction to the three volume edition of Paré's works (Paris, 1840) has always been held in merited esteem as one of the most learned contributions to the literature of surgery; but it is defective in some important particulars, for want of documentary evidence. This has now been discovered in the National Archives of France and in family papers, and given to the world by Dr. le Paulmier, through Charavay Frères (Paris, 1885). Born at Laval in 1510 of very humble parentage, Paré overcame all the disadvantages of poverty and defective education, and worked his way, through a life full of vicissitude, to the position of surgeon-in-chief of two of the kings of France and of recognised leader amongst the surgeons of his time in all countries. He was a prolific author for over forty years, had a large private practice, and rode many thousand miles as chief surgeon to the national armies. No labour seemed too great for him. He found favour with no less distinguished contemporaries than Bernard Palissy and Coligny, Sylvius and Catherine de Medicis. When Henry II. was accidentally but fatally wounded in the famous tournament by Montgomery, Paré was first consulted, and then Vesalius attended from Brussels. A Huguenot, Paré was spared by Charles IX. in the massacre of St. Bartholomew; and the orthodox members of the Paris Faculty, who had waged a long and envious war against the master-surgeon, witnessed the double triumph of his morality and of his professional skill. Of nine children by two wives, three daughters survived him but no son. At his death, on Thursday, Dec. 20th, 1590, Paré was a wealthy man, and held a commanding position. He was interred two days later in the church of St. André-des-Arcs, and, contrary to the wish he had expressed, with great pomp. He was of middle height, and had always enjoyed robust health. Conscious of his great powers, he sometimes laid himself open to the charge of vanity, but his honour was never questioned. He was a hard fighter, but a faithful friend; and in the practice of his profession he won gratitude as much by his considerate kindness as by his consummate skill. He has come to be regarded as, beyond question, the father and founder of modern surgery.

REFORM OF THE CORONER'S COURT.

IT is disheartening to find that the subject of reform in relation to the coroner's court has been so effectually shelved by the abortive inquiries made from time to time during the last ten years with the ostensible purpose of effecting necessary changes. At the present moment the tribunal which is practically the most useful, though not the most efficient, part of the judicial machinery for the purpose of repressing crime stands in a worse position than it occupied before attention was pointedly directed to its defects. It is discredited, and those who are responsible for the conduct of its business are hampered in the discharge of their duties. It surely need not tax the time of the Legislature too heavily to discuss and pass a Coroner's Bill, if only a good working Bill embodying the reforms which have been so repeatedly indicated could be drafted and launched under ministerial patronage. The best plan seems to be to constitute the coroners local officers of inquiry with special qualifications as medical jurists and analysts, so that the facts to be afterwards dealt with by the purely legal tribunals may be thoroughly sifted by a technical court of first instance. The coroners thus acting would be available as assessors to the higher courts in special cases, or they might be empanelled as a jury in cases of need to determine issues involving special knowledge. The local coroner's "courts" or juries would thus be restored to their old position as corps of observation to see fair play—as it were—by the representative of the Crown, the "crowner" or coroner. There would be great convenience in considering this proposal just now while the Bill before the Legislature for the amendment of the lunacy laws is passing through Parliament, because there is much need of a local official before whom questions of lunacy might be raised; and the creation of a class of specially qualified coroners who were possessed of technical knowledge, and at the same time raised above the suspicion of bias by being wholly official, would greatly facilitate the working of the new statutes relating to the care and custody of lunatics.

PREVENTION OF RIVER POLLUTION.

A MEETING was held at the Mansion House on Wednesday, on behalf of the Society which has been formed to procure effective legislation for the prevention of river pollution. The Lord Mayor presided, and the meeting was attended by the Attorney-General, Lord Hardwicke, Mr. Hastings, M.P., and others interested in the question. The Attorney-General pointed out the objects which the Society had in view, and dwelt upon the reasons which had led to the failure of the legislation of 1876 to protect rivers from receiving sewage and the refuse from manufactures, and he urged that the only remedy was to be found in further legislation, which would enable the subject to be dealt with as a national question. If legislation is to be effectual, it was argued, the duty of protecting rivers must no longer be imposed upon local sanitary authorities, who are often themselves the chief offenders, and it must be open to all persons

affected by the pollution to set in motion the machinery for preventing its continuance. Mr. Norman Bazalgette spoke strongly in favour of a standard of impurity being fixed by law, so that no question should remain to be settled by those who have to enforce the Act, and he referred to that of the Metropolitan Sewage Commission as being the best that can be adopted. This is obviously debatable ground, and if the Bill which is introduced by Mr. Hastings pass the second reading, it may be expected that it will be modified in this as well as in some other respects in committee. But with the general principles of the Bill we are in accord, for the fact remains that the pollution of rivers is at the present time a standing danger to the country, and the Act of 1876 has been found altogether wanting in the means which are required for the effectual dealing with this danger.

EPSOM COLLEGE.

SIR ANDREW CLARK, Bart., has kindly consented to take the chair at the twenty-third festival dinner of the Royal Medical Benevolent College, to be held at the Holborn Restaurant on Thursday, May 11th. As the College has no endowment, the whole cost of maintenance of the fifty foundation scholars and the fifty pensioners has to be defrayed out of the annual subscriptions and donations; these, we regret to see it stated, have for some years past been insufficient for the purpose. The pressure for the admission of foundation scholars is so great that it will be lamentable if it should become necessary to reduce their number; but a reduction will be inevitable unless the regular income can be increased. Under these circumstances we are sure that the profession will "rally round" so distinguished and representative a chairman as Sir Andrew Clark, and will use their influence, which is great, with the public on behalf of an excellent institution, the benefits of which, by the way, are not altogether limited to the disciples of healing.

THE PEABODY BUILDINGS IN 1885.

THE Trustees of the Peabody Donation Fund have recently issued their twenty-first annual report, which relates to the year 1885. It is eminently satisfactory to learn that the sphere of usefulness of this fund is constantly enlarging. At the close of last year the population housed in the dwellings erected by and belonging to the fund exceeded 20,000, and the assets of the Trust, consisting almost exclusively of the various blocks of buildings, exceeded £881,000, or £381,000 more than the £500,000 originally bequeathed to the Trust by Mr. Peabody. The net income of the fund, arising from the balance of rents in excess of expenses, now considerably exceeds £20,000, and steadily increases from year to year; and as this net income is added to capital by reinvesting it by the provision of improved dwellings, there is practically no limit to the beneficial influence of the fund upon the housing of the poor in London. The buildings already in occupation at the end of last year contained nearly 5000 tenements, of which more than 3000 were tenements of but one or two rooms. The report states, moreover, that the average weekly earnings of the head of each family in residence at the close of the year was under 24*s.*, and the average rent of each room very slightly exceeded 2*s.* These figures refute many of the objections that have been made from time to time against the management of the fund. With reference to the vital statistics of the population housed in the Peabody Buildings during last year, it appears that the birth-rate was equal to 45·2 per 1000, which was 12·7 in excess of the mean birth-rate in the whole of London. The death-rate, including the deaths in hospitals of inhabitants of the buildings, was 19·6, and was practically identical with the general London rate. The rate of infant mortality was 139 per 1000 of the registered births, and 9 below the average rate in London. The population of the Peabody Buildings is essentially a working-class population, and its mortality statistics have therefore special interest. For comparative purposes, however, it is necessary to bear in mind the age-constitution and other circumstances of the population, which materially affect its death-rate. It may be noted, as might be expected from the birth-rate, that the inhabitants of these buildings include an undue proportion of children—namely, 19 per cent. under five years of age, against 13 per cent. in London. On the other hand, only 3 per cent. of the Peabody population are of persons aged upwards of sixty years, whereas the proportion in the whole of London is 6 per cent. One other point should also be borne in mind. The statistics of the Peabody Buildings take no account of those residents who drift into the metropolitan workhouses, although nearly 13 per cent. of the total deaths in London last year occurred in workhouses. On the whole, however, after making allowance for these disturbing influences, the death-rate in these buildings last year affords evidence of satisfactory sanitary condition, although more detailed mortality statistics of this working-class population would possess especial interest.

UNSTRIATED MUSCLE IN THE KIDNEYS.

THE presence of a few scattered smooth muscular fibres in the kidneys has been noticed by several observers, and especially by Henle and Eberth; but Dr. Jardet of Vichy has, in a short memoir contributed to the *Archives de Physiologie* of February 15th, shown that there is a regular system of such fibres. Most of the text-books state that a layer of smooth muscular fibres is present in the pelvis and calyces, the origin of which is referred to the double muscular layer of the walls of the ureter. Henle describes a special muscular annulus, composed of longitudinal and circular fibres around each papilla, lying just beneath the membrana propria. The longitudinal layer ceases at the plane of the floor of the pelvis; the circular layer may be traced some distance into the renal substance. The function of these fibres is to drive the urine forwards from the papilla into the pelvis. Eberth found, in man, a plexus of unstriated muscular fibres with large meshes on the surface of the kidney. Some of these fibres dip into the cortical substance of the kidney. The system of fibres described by Dr. Jardet were first noticed by him in pathological specimens, but were afterwards found to be present in the normal kidney. The situation, when they came clearly into view, was in transverse and vertical sections of the pyramids of Malpighi. They occupied the perivascular conjunctival sheath of the vessels, and never extended far amongst the renal tubuli. The fibres are grouped into small fasciculi, which spring from the pelvis and run parallel to the larger arteries and veins, but do not constitute a complete sheath to any vessel. They become hypertrophied in lithiasis, in hydronephrosis, and in all chronic inflammations of the kidney.

ETHER AND OPIUM IN SMALL-POX.

DURING a recent meeting of the Medical Society of the Paris Hospitals, MM. Dreyfus-Brissac and Balzer mentioned that they had tried M. du Castel's ether and opium method of treating small-pox for a considerable time, and had convinced themselves of its efficacy. It consists in subcutaneous injections of ether, a daily dose of from fifteen to twenty centigrammes of opium being administered by the mouth. In severe and confluent cases the papules become abortive, suppuration is diminished, and the general improvement is rapid. M. Balzer prefers administering the ether as well as the opium by the mouth, but M. du Castel considers this less efficacious than the hypodermic method.

COMPLIMENTARY DINNER TO SIR W. ROBERTS.

ON Saturday, the 6th inst., the members of the medical profession of Manchester and the district gave a complimentary dinner to Sir William Roberts, in recognition of his great services to medical science, and to congratulate him upon the honour of knighthood recently conferred upon him. The dinner took place at the Queen's Hotel, Manchester, Dr. Henry Simpson presiding, and there were about sixty guests. All the hospitals of the district were well represented by the presence of members of their various staffs, and there were also a number of other gentlemen, most of whom had either been fellow-students of Sir William Roberts, or had been for many years intimately associated with him in Manchester. After dinner the President, having given the usual loyal toasts, proposed the health of Sir William Roberts, whom he had intimately known from the time when they were fellow-students at University College Hospital. He referred briefly to Sir William's fruitful professional career, from the publication of his first essay on "Wasting Palsy" onwards, alluding more especially to his "Urinary and Renal Diseases," and his more recent work on Digestion. In doing so he emphasised the care which Sir William had always taken to make his work of real and lasting value, and not to write so as merely to catch the ear of the ὁι πολλοι. The toast was drunk with the greatest enthusiasm. Sir William Roberts, in his reply, cordially thanked his friends for the welcome they had given him, and dwelt upon the good fellowship and unanimity of the members of the medical profession in Manchester. The President's health was given by Dr. Buchanan, of the Local Government Board, who related sundry amusing anecdotes of the days when Sir William Roberts, Dr. Simpson, Dr. Briggs, Mr. Smart, he himself, and many others present were fellow-students with Sir Henry Thompson, Sir William Jenner, and others whose names are of world-wide celebrity. Dr. Briggs then proposed the health of Mr. Lund, who briefly replied, after which the evening was concluded with songs from Dr. Simpson, Mr. Dowse, and Mr. Luckman. The necessity imposed upon many of the guests of catching trains to outlying towns caused a somewhat early termination to a most enjoyable evening.

A HIGHLY PRAISED DIURETIC.

THE treatment of dropsy with Apocynum Cannabinum (American Indian hemp), by no means to be confounded with cannabis indica, was lately the subject of an interesting paper read by Dr. Andrew H. Smith before the New York Academy of Medicine in the section of Materia Medica and Therapeutics. This plant is indigenous in America, and has long been used and prized for its diuretic properties. Dr. Rush called it "the vegetable trocar." Dr. Mott used it, but thought it too active for any but sthenic cases. In 1869 attention was re-directed to it by Dr. Harvey Jewett of Canandaigua, N.Y., who, "as a tonic and diuretic," regarded it as more efficient in the cure of general anasarca and in removing the accumulation from serous sacs than all other remedies known to the profession. In atonic cases he recommended small doses at short intervals. A rapid cure was the result in his hands, where there was not incurable organic disease. The drug has a place in the Pharmacopœia of the United States, in the form of powder of the root and a tincture prepared from this (see Martindale and Westcott's Pharmacopœia). But Dr. Jewett used a decoction made with one drachm of the bark of the fresh root to eight ounces of water; of this the dose was half an ounce every six hours. In 1875 Dr. Hutchins related a case of general anasarca, with pleuritic effusion and hydropericardium, extreme dyspnœa, and enormous distension, in which some of the drug gathered by and got from Jewett acted so that in forty-eight hours the man who had been so frightfully distended was reduced to a skeleton. Dr. Smith's cases were three in number. One was a failure, perhaps owing to a bad selection of the drug. In another—a case of renal disease, with scanty urine and threatening uræmia—the apocynum excited profuse diuresis, and danger was averted. The third case was one of general anasarca, ascites, and œdematous lungs, with extreme dyspnœa, face cyanotic, and mind wandering. All diuretics had failed, and it seemed unwise to annoy the patient with further treatment; but as a *dernier ressort* the apocynum was tried, and the quantity of urine was raised from between six and twelve to thirty ounces, and the urgent symptoms were relieved. The drug evidently deserves attention, and to have its action and uses defined.

THE ABUSE OF PROVIDENT DISPENSARIES IN MANCHESTER.

THE Manchester and Salford Provident Dispensaries scheme is a very large one, and ought to be worked upon very strict principles; but we have had occasion to question whether the dispensaries were not open to great abuse, chiefly on account of the abolition of the rule which prescribed a wage limit beyond which persons were not admissible as members. Very explicit confirmation of our views is supplied in a letter by a working man published in the *Manchester Guardian*, and which is so much to the point that we give it in full.

"Pendleton, Feb. 27th, 1886.

"DEAR SIR,—I would have answered your note sooner, but I have been working late and have not had an opportunity before now. While I sympathise to a certain extent with the object of the provident dispensary, yet I fear and know that it is largely taken advantage of by the improvident. I have known many members of above earning from 40*s.* to 60*s.* per week (piecework), able to lose and win heavy bets, stop days off work drinking, and otherwise squander their earnings, and yet take advantage of this and other charities. Of course it is a long-vexed question how to deal with such. Still I presume it is more of the well-to-do you want to know, and of these I do know some—one a family of five (wife, husband, and three children); husband 35*s.*, and children earning upwards of 30*s.* per week. I am not quite sure if they are all in, but I know the husband is a member and recently received benefit. I knew a young man (single), wages upwards of 36*s.* per week, who received considerable benefit. He has lately left Pendleton. Also I know a man (married, two children), wages over 40*s.* per week, who received benefit. He has lately left Pendleton. I have not the paper, but I think Mr. Harwood referred to some rule that applicants for membership were inquired into before being admitted. This is certainly not the case. I joined myself among upwards of a hundred more in the works some three years ago, and I think I am safe in saying not one case was inquired into if suitable; certainly mine was not, and the question of wages was not mentioned by the agent who came down to propagate the scheme.

"I am, &c., ——."

LYING-IN HOSPITAL MORTALITY.

THE reports of the mortality of lying-in hospitals form much pleasanter reading than it used to be. That of the General Lying-in Hospital, York-road, Lambeth, is before us. The medical report, by Dr. Williams and Dr. Champneys, is very satisfactory. There were 395 women confined in the hospital, of whom 4 died. As out-patients 850 women were confined, and 2 died. The cause of death of the two out-patients is not stated. At first sight the death of four in-patients looks unsatisfactory, but in a footnote it is explained that only one of these died of septicæmia. Two women were admitted in advanced consumption, and the fourth death was from chronic renal disease. The exclusion of such cases would improve the results, but they would reflect little credit on the humanity of the physicians.

A hospital exists, not for show tables of mortality, but for the accommodation of the afflicted. We have before alluded to the care with which antiseptic douches, ventilation, and cleanliness are practised in this institution, and to which, doubtless, the abeyance of septicæmia is largely due. In the last five years 1508 women have been delivered, of whom 11 have died, or 1 in 142; 218 nurses have been trained, and 52 midwives, of whom 42 have obtained the diploma of the Obstetrical Society. As regards the mortality, it is to be noticed that it is the total mortality from all causes, including diseases unconnected with childbirth. Cases leaving before recovery had taken place were traced, and the result is embodied. This care and candour are to be much commended. We have only one fault to find with the medical report, and that is its brevity. Short of mortality, what were the complications of parturition, and how were they dealt with? What was the average duration of labour? What the proportion of primiparæ? What the frequency of instrumental cases? What the defects or diseases of the infants born in the hospital (400), of whom 10 were stillborn and 12 died after birth. The last paragraph of the general report is devoted to a warm and well-earned acknowledgment of the services of Dr. Williams, whose other duties have compelled his resignation, but who leaves the hospital in a very different position from that in which he found it.

THE URINE IN PUERPERAL ECLAMPSIA.

M. DOLERIS has found that some specimens of the urine of patients with puerperal eclampsia give, on drying, crystals whose composition is at present undetermined, but which are slightly soluble in alcohol and soluble in acidulated water, and a somewhat concentrated solution of which injected into animals killed a rat and three sparrows, while comparative experiments made with a portion of solution containing no crystals produced no effect. M. Doleris found a normal amount of urea in the blood of two patients dead of the disease, but an increased amount in that of two others who were cured. In one case only were soluble and toxic ptomaines met with. He believes that puerperal eclampsia is of an infectious nature, for it is not only the kidney which is affected but other organs, the liver in particular presenting characters more or less allied to those noted in acute yellow atrophy.

THE PORT OF LONDON.

THE provision of a new steam launch has led to a large increase in the amount of inspection carried out by the officers of the Port Sanitary Authority of London, and as many as 12,663 vessels were thus dealt with during the latter half of 1885. This work tends steadily to improve a large amount of shipping of various nations, and thus to conduce to the general benefit of crews and passengers. During the past half year an unusual number of structural alterations have been made with a view of improving the hygienic condition of vessels, and many of these have been found necessary even in the case of perfectly new vessels. It would doubtless save much expense in the long run, if the medical officers of ports were consulted as to the sanitary aspects of the question whilst the ships were building, for it is of necessity a somewhat costly thing to alter forecastles when the vessels are finished, and Dr. Collingridge does well to point this out. Special precautions were taken to prevent the importation of articles of infected clothing belonging to persons who had died of cholera and other spreading diseases. As regards cholera itself, no case or suspected case appears to have entered the Thames; but the arrangements for isolation and disinfection, which are well devised and excellently carried out in the case of the other dangerous infectious diseases, were kept in readiness. During the month of August a large number of boys in the training ship *Warspite*, lying off Charlton, were attacked with diarrhœa, and after a very exhaustive inquiry into its possible causes, Dr. Collingridge finds himself compelled to attribute it to the foul state of the river. The boys were all seized in the night; and the worst nights, in point of numbers attacked, were those when the river was very bad; whereas when the river was less foul the disease subsided; and we feel that, so long as the Thames remains in its present state, the report is correct in describing so much of it as lies above Gravesend as an improper place for mooring such a vessel. The port hospital and its ambulance launch are kept in good order, nuisances are well controlled, and the enforcing of the provisions of the Canal Boats Acts, which has now been thrown upon the Port Sanitary Authority, has been commenced in a manner that gives good promise of efficient administration in this matter.

THE FUNCTIONS OF THE CORPUS STRIATUM.

HERRN BAGINSKY and Curt Lehmann brought before the Physiological Society of Berlin, at the meeting on Nov. 13th, 1885, the results of their researches on the functions of the corpus striatum. They remark that as these organs lie deeply embedded in the brain they cannot be reached without considerable damage being inflicted on other parts, and they took pains to adopt a method which should minimise this injury. They found the plan which gave the most exact and uniform results was to plunge a fine glass tube into the corpus striatum and place the other extremity of the tube in connexion with an exhausting syringe, by which the substance of the corpus striatum could be sucked out. The experiments were made on rabbits. If that part which projects into the ventricle were removed, the phenomena presented were that the fore and hind limbs of the opposite side were extended if the animal were previously in the sitting position. The extremities, and especially the anterior limbs, could easily be placed in anomalous positions, in which they remained till a stronger stimulus was applied. The movement of the extremities offered a certain resistance to the hand of the operator, which was greater than that of the opposite side. No motor defect was observed when the animal ran or made other voluntary movements. The temperature of the body remained normal, or only rose slightly and at a late period. The animal showed great excitability and much tendency to fear upon various sense impressions, making energetic efforts to escape by jumping from side to side. When the brain substance was removed down to the corpus striatum, without injury to that body, the same symptoms were observed, except that the rise of temperature was more common and greater. The authors of the memoir therefore arrive at the conclusion that the functions of the corpora striata do not differ materially from those of the superjacent brain substance.

ISOLATION ARRANGEMENTS AT DERBY.

WE are glad to find that the Corporation of Derby have at last decided to erect a permanent hospital for the isolation of infectious diseases. The experience of Derby in this respect has hitherto not been fortunate, except in so far as it has been useful in preventing the sanitary authorities of other districts from erecting temporary buildings under the influence of panic. Such buildings rarely answer the immediate purposes for which they are erected, and their after history is one which is full of warning, for the buildings are often allowed to decay, and they deter people from accepting the isolation offered them; or if they are kept in decent repair they are very costly. And, worse still, the

existence of these barn-like buildings prevents the erection of proper hospitals. Derby, after some thirteen years' experience of such a building, now intends to erect a proper hospital of thirty-two beds. The number of beds is by no means excessive, amounting as it does to one bed for every 2800 inhabitants; but the County Infirmary has a special fever pavilion, and the immediate isolation which may be expected to follow on the notification of infectious diseases which is compulsory in the borough may tend to make a larger amount of accommodation unnecessary. From the report before us we learn that no Isolation Pavilion has been provided for. We should counsel the authority to reconsider this matter, for if they do their work promptly and efficiently they will stand much more in need of a pavilion containing accommodation in separate small ward-rooms for one and two patients, than for large ward-buildings so designed that if a single patient suffering from one infectious fever is received into any one of them, no other case of a different disease can be taken into it. It has more than once happened that authorities with two large pavilions have been obliged to keep all their available accommodation in working order because they happened to have taken in two patients who were suffering from two different diseases. An isolation pavilion such as has been designed by the Local Government Board would, under these circumstances, have provided better and more suitable accommodation in two small rooms, and this at a minimum cost for maintenance and administration.

AN EXPERIMENTAL INQUIRY INTO THE NUTRITIVE VALUE OF BEEF EXTRACTS.

AT a recent meeting of the College of Physicians of Philadelphia Dr. Thos. J. Mays read an important paper, in which he described the results of a series of careful experiments made with various beef extracts upon the isolated frog's heart. An abstract of the paper appears in the *Medical News* of Philadelphia of Feb. 27th. Dr. Mays conducted his experiment as follows. The Kronecker-Bowditch heart apparatus was used, and was connected with a proper recording apparatus. By means of a double cannula it could be supplied with any desired material, and in order to keep it pulsating regularly, minimum shocks of one Daniell's cell through a Dubois sliding induction coil were employed every four seconds. The heart was first of all well washed out with a ·6 per cent. saline solution, after which it was allowed to work with the same until all its stored-up material was exhausted and its pulsations reduced to zero. Then a weak solution of the inorganic salts of the beef extract was tested, and found to fail in every instance to induce cardiac contractions; a solution of urea failed in the same manner. Solutions of various beef extracts diluted with the ·6 per cent. saline solution were then employed. Solutions of 1 in 100 and 1 in 500 failed to restore contractile power to the heart, but when the extracts were diluted in the proportion of 1 in 666 to 1 in 2000 the heart's action was revived and maintained. This having been ascertained, another series of comparative experiments was undertaken. A heart, having been prepared as before, was filled with a 2 per cent. solution of dried bullock's blood, and the number of times the heart beat was taken as a standard. The heart was then washed out with the saline solution and filled with one of the fluids to be tested, and the number of contractions counted. In this way the nutritive value of these solutions of beef extracts was compared with that of dried bullock's blood, which is stated to be one-third of fresh blood. Five beef extracts were thus tested, and their value was found to be very similar, for if the standard of dried bullock's blood be taken as 100, the contractions excited by these solutions were respectively 58, 59, 60, 61, and 62, which, allowing for errors in the experiment, may be taken as a uniform figure, 60. A mixture of beef extract with milk and gluten, sold under the name of beef peptonoids, ranged at 74. From these experiments Dr. Mays infers that solutions of beef extracts are absorbed and assimilated by the isolated frog's heart, that they contain material which has the power of inducing muscular contraction, and that they are entitled to be called nutrients in the full sense of that term. In a further series of similar experiments, Dr. Mays hopes to show which of the many organic constituents of these preparations really possess this power; but owing to the difficulty of isolating them this part of the investigation has not at present been completed. In view of the great diversity of opinion as to the nutritive value of beef-tea and meat extracts of all kinds, accurate scientific observations, such as those of Dr. Mays, are of considerable interest and of great practical value.

THE PASTEUR INSTITUTE.

THE institute that is to be named after M. Pasteur will stand as a monument of his great services in the cause of suffering humanity. International in its scope—for it is reckoned that the single establishment will be able to cope with the average annual number of cases of hydrophobia,—it is but right that the subscription list should be open to the world at large. The estimated cost of the edifice is 80,000 francs. Already a large sum has been contributed. Paris will add by this projected scheme one more claim to be regarded as the first city in the world.

SIMPLE CONTINUED FEVER.

PROBABLY no investigations in medicine are more directly responsible for the saving of human life than those which caused the three diseases—typhus, enteric, and relapsing fevers—to be distinguished from each other. They have enabled the etiology of these affections to be definitely studied, and have been the foundation upon which has been erected the whole superstructure of the means for their prevention. Clinically, these diseases differ from each other in so many important particulars that to those who study medicine at the present time there is almost a feeling of surprise that they were so long confounded with each other. But the knowledge which was required to enable them at first to be differentiated was not at once available. Observation was based upon previous observation, and many workers were required to add their contributions to the total sum necessary for the attainment of a definite decision. The work, however, which has already been done is not all that is required for a proper understanding of the acute febrile affections, which still cause loss of life in this country. During the decade 1871-80 as many as 25,643 deaths were registered in England and Wales from "simple continued fever." Under this heading is doubtless classed more than one disease, and before there is any possibility of the prevention of this vast mortality prolonged and patient work must enable each to be clearly understood. Fortunately the opportunities for their study have increased, and are still increasing year by year. Improved microscopical and biological methods add to the hope that by their means first one point and then another will be gained until the whole can eventually be trusted to teach lessons not less valuable to mankind than those which served to show that the conditions which give rise to typhus are altogether different from those producing enteric fever, and that both sets of conditions differ from those upon which relapsing fever is dependent. Such work as Mr. Alfred Lingard is now carrying out in connexion with disease caused by the air contents of sewers is especially of the kind likely to lead to definite gain, and the Grocers'

Company deserve the gratitude of all interested in the public health for the opportunity they have given for his researches. These have already been fruitful in their results, and the observations which are in progress will, we anticipate, be the beginning of a better understanding of those mysterious affections which we have been content as yet to class together as simple continued fever. The profession will gladly await the completion of these studies. The premature publication of investigations which are still in progress is to be deprecated, for it is above all things necessary that every observation should be fully substantiated.

THE HEALTH OF THE PREMIER.

WE learn that Sir Andrew Clark at his morning visit on Thursday found the Premier progressing favourably, but still needing to carefully keep his room. Mr. Gladstone is suffering from a feverish bronchial catarrh without complication. Obviously, in the present season, such an attack must not be neglected; but it is confidently expected that Mr. Gladstone will be able to be in his place next week.

MEDICAL SOCIETY OF LONDON.

A VERY successful dinner was held on Saturday last at the Holborn Restaurant, Dr. W. M. Ord, the retiring president, being in the chair. In responding to the toast of "The Army, Navy, and Reserve Forces," Sir Guyer Hunter, M.P., considered that the "capitation fee" for Volunteers was altogether inadequate. Dr. Broadbent proposed the toast of "The President," and spoke in feeling terms of their friendship and of the success that had attended the Society's meetings during the past year.

EFFECT OF LIGHT ON BACILLUS ANTHRACIS.

ACCORDING to M. Arloing, gas-light is slightly prejudicial to the growth of the bacillus anthracis. The sun-light of summer rapidly suppresses the vegetation of the spores if the rays of light can penetrate easily the fluid media that hold the bacillus in suspension. Sun-light also interferes with the growth of the mycelium, and is an agent as effective as heat for the attenuation of the virus of charbon. The effect of sun-light is due to the action of all its component rays; the effects are proportional to the intensity of the light and the transparency of the media.

CLASSICAL EDUCATION AND SOCIAL POSITION.

A SOMEWHAT long debate has taken place in the Bavarian Landtag on the question of the admission to the University faculties of medicine of students who have received their preliminary education in real gymnasia—that is to say, in institutions corresponding to the modern sides of our public schools, where Greek is not taught, but greater attention is paid to science and modern language than in purely classical schools. This proposal did not command the sympathy of the majority of the members, although it was admitted that a knowledge of Greek is by no means necessary to enable a student to become a first-rate scientific practitioner. The *Münchener Medicinische Wochenschrift*, referring to this subject, remarks that in many other countries a classical training is not required of medical students, but that the want of this is found to lower the social status of the profession in those countries—this being notably the case in England—"where even for the highest medical diploma, M.R.C.P., a knowledge of Greek is not compulsory. Nevertheless medicine in England has produced much valuable original work; but the profession is obliged to be content with a subordinate position, the highest circles of society to which the clergyman and the lawyer have access being closed to the doctor;" and in particular he is never raised to the dignity of the peerage, "the prejudice against the medical profession being doubtless due to the fact that the majority of English doctors are lacking in refined classical education" (!) With this sad example as a warning, let the profession in Germany "hold fast by the talisman which is its only security in claiming a position equal to that of the other learned professions—a classical training." Though it is much to be desired that as high a standard of preliminary education as possible should be insisted on, it can hardly be true that the cause of the "subordinate position" which the medical profession is said to hold is due to the want of a knowledge of Greek, which is probably far less usual amongst doctors than amongst military and naval men, whose profession of arms has certainly no reason to complain of any want of social consideration, and which leads pretty frequently to a seat in the House of Lords—a Chamber, too, which, fortunately perhaps for some of its hereditary members, does not close its portals to those destitute of a "refined classical education."

THE LATE PROFESSOR PANUM'S SUCCESSOR.

FOR the late Professor Panum's post of Professor of Physiology in the University of Copenhagen four candidates presented themselves before a committee of experts, one of whom, Professor Holmgren, had been specially invited from Upsala. Each candidate read papers on various topics, and the committee decided in favour of Dr. Chr. Bohr, who had been assistant to Professor Panum and had been specially recommended by him as his successor. The other candidates were Dr. Buntzen and Dr. Vogelius.

THE INCUBATION PERIOD OF SMALL-POX.

PROF. EICHHORST of Zurich has had an opportunity of accurately observing the incubation periods in three cases of small-pox occurring in a medical man and two medical students. They were very nearly alike, and much shorter than is commonly supposed, being respectively nine days eight hours, nine days eight hours, and nine days fourteen hours; whereas it is usually stated to be from twelve to fourteen days.

ON the 8th inst. the death occurred, at his residence in Salisbury, of Mr. R. W. Read, F.R.C.S., Deputy Inspector-General of Army Hospitals. Mr. Read studied medicine at St. George's Hospital, and became a Licentiate of the Society of Apothecaries and a Member of the Royal College of Surgeons in 1841, a Fellow of the Royal College of Surgeons of England in 1857, and a Fellow of the Royal College of Physicians of Edinburgh in 1859. He was appointed an assistant-surgeon in the Army Medical Department in 1844, became a surgeon in 1855, surgeon-major in 1864, Honorary Deputy Inspector-General in 1869, and was placed on half-pay in the same year. Mr. Read, who was a magistrate for the city of Salisbury, had contributed papers on "Revaccination in the Army" and "Radical Cure of Hydrocele," &c., to the columns of this journal.

THE Vienna Town Council on the 5th inst. discussed and rejected the proposal of the Princess Metternich that medical men should be sent from that town to Paris to learn M. Pasteur's method of treating hydrophobia; but a resolution was passed that the Government should be requested to take the matter into its own hands.

THE Countess of Dufferin has written for the April number of the *Asiatic Quarterly Review* a paper describing the objects of the Fund for supplying female medical aid to the women of India, which is identified with her name.

ON the 3rd inst. the death occurred at Rochester of Deputy Surgeon-General Alexander Guthrie, principal medical officer of the Chatham district. The deceased officer, who was in his fifty-fourth year, joined the Army Medical Service in 1854, and served in India during the mutiny, being present at the action at Cawnpore and the siege and capture of Lucknow; he served also in the Trans-Gogra campaign and the Afghan expedition of 1880.

AT an investiture held by Her Majesty at Windsor Castle on Tuesday last, George Edward Paget, Esq., M.D., with other Knights Commanders of the Order of the Bath, was introduced into the presence of the Sovereign, who conferred upon him the honour of knighthood, and invested him with the insignia of the Civil division in the Second Class of the Order.

ON the 10th inst. the death occurred of Dr. John Storrar, the representative of the University of London in the General Medical Council and late chairman of Convocation of that University. We hope in a future number to give some particulars of the services rendered by the deceased to the cause of medical education in this country.

THE Professorial Senate in Vienna have under discussion the question of establishing a dental school in connexion with the medical faculty. A committee has been appointed, consisting of Professors Albert and Billroth and Drs. Schiff and Sternberger, docents in odontology, to draw up a scheme for consideration.

THE outbreak of yellow fever on board H.M.S. *Urgent* at Port Royal which we mentioned in a recent issue still continues, and the vessel has been removed to the quarantine ground and thoroughly cleansed and fumigated. Amongst the latest deaths was that of Mr. Anderson, surgeon of H.M.S. *Tyne*.

DR. DUDGEON of Pekin, who is said to possess great influence with the leading statesmen of China, is writing a History of Opium. The work, which is partly in type in Pekin, will contain much novel information concerning the early history of the supply and its introduction into China.

IN an action brought by the governors of the London Hospital to recover possession of more than 100 houses in Whitechapel, judgment was given on the 9th inst. for the plaintiffs. The action was brought against the leaseholders on account of breach of covenant to repair.

WE understand that the Colleges of Physicians and Surgeons of Edinburgh and Glasgow have just decided to throw open to women their conjoint examinations and "triple qualification" in medicine, surgery, and midwifery.

TELEGRAMS from Venice received in Rome announce that a case of cholera has occurred on board a brigantine, which arrived there a few days ago from Greece. The vessel was immediately sent to the quarantine station.

DR. ROBERT SAUNDBY has been appointed consulting physician to the Birmingham and Midland Counties Hospital for Women, in succession to the late Dr. Heslop.

THE annual report and balance-sheet for 1885-86 of the Vaccination Officers' Association, which has just been published, is a highly satisfactory one.

THE ILLNESS OF THE LATE MR. COOPER FORSTER.

THREE possible causes for Mr. Cooper Forster's illness were discussed by his medical attendants, and the post-mortem did not satisfactorily determine which of them or any other was the efficient one. The deceased gentleman left London for Cannes on Jan. 21st, and stayed there about three weeks; he then proceeded to Nice, where he remained a few days, and then on to Mentone. He was here but a few hours, and then returned straight home, arriving on Feb. 24th. At the beginning of the latter month he felt unwell, and after that he gradually lost his appetite and strength so as to be unable to take his usual walks, such as he had accomplished on his first arrival at Cannes. During the last week of his sojourn abroad he ate scarcely anything, until his appetite at last entirely failed, and he at once resolved to return home. He was unable to secure a "coupé lit," and was obliged to take his seat in a crowded carriage, his fellow-passengers kindly affording him as much opportunity as possible for rest. He ate nothing during the journey, and when he arrived home his servant was struck by his deadly appearance and with difficulty got him to bed. When I saw him he had a most haggard look, spoke in a whisper, as if suffering from the most extreme exhaustion. After a few hours he became very feverish, his tongue parched and hard, and his temperature 103°. This temperature was reached each successive afternoon, falling two degrees in the morning. His loathing for food was extreme, and most of what he took he rejected. Dr. Habershon then saw him, and was unremitting in his attention until the end. No maculæ appeared and no diarrhœa. He passed a very restless night, and on the following day could still take but little food. Dr. Habershon suggested some effervescing quinine, but he refused a second dose. We were first in hopes that his loss of appetite from foreign living was the sole cause of his illness, but we subsequently believed that he must have been the victim of typhoid fever. Sir J. Paget and Mr. Hutchinson discovered no cause for blood-poisoning, but the latter thought that a chronic skin eruption from which the patient suffered might be important. There was a painful spot in the left arm, which he attributed to a sprain in fishing. On the third day he took his food, stimulants, and quinine better, and we believed we saw an improvement. On the fourth day he continued to take a fair amount of nourishment, but in the evening became more prostrate, pulse more feeble, and gradually sank.

Dr. James Anderson and Mr. J. Hutchinson, jun., made the post-mortem examination. They found the organs congested, as is usually the case in those dead of blood diseases, and they thought the kidneys were not quite sound. These organs acted most efficiently during life. There was no disease of the intestines. This fact excludes the question of typhoid—unless, indeed, it may exist without the usual phenomena in persons of advancing age. In these Peyer's patches are inactive or atrophied, a reason given by Dr. Tweedie why typhoid fever does not affect aged persons. If the theory be true that Peyer's glands first receive the germ and then develop it until they become the infective source of the disease, it might even then be a question whether the system would be completely proof against the effects of the typhoid poison, even if these glands no longer existed. If so, it might kill without the usual intestinal lesion, just as scarlatina may prove fatal without a rash, or variola without pustulation. In typhoid, however, the anatomical basis is supposed to lie in the intestines, and, with our present views, the possibility of its existence without this must be rejected.

As regards Mr. Forster's illness having been due to a subacute gastritis, brought about by unpalatable food, there is much to be said in its favour. The capability of this producing a febrile condition is set at rest by the observation of Sir J. Paget when we talked it over in consultation. Sir J. Paget had a relative, a clergyman, working hard in the East-end of London, and, forgetful of the necessity of eating good food, he became so much impoverished that he was obliged to desist from his labours, but by care and feeding soon regained his health. During the time of his illness the temperature of the body was much above normal. One is aware

that in children the fever accompanying gastro-intestinal disorder is very high, and to this complaint gastric fever was formerly appropriately given. The term is now discarded, as it was constantly substituted for the more specific term typhoid; nevertheless, there is much need of the expression, since the fever is the most marked symptom, and the gastric disturbance not sufficiently defined to allow of an anatomical name. Our patient might be said, then, to have a gastric fever, and brought about much in the same way as in children—by improper diet. He had not travelled during youth, and when of late years he had gone abroad he had on the two occasions suffered much from the living. I met him once at Cologne, and he was then ill, suffering from gastro-intestinal disturbance and looking very haggard. I prescribed for him, and he hurried home. On the other occasion, his son-in-law informs me, he became very ill and lost flesh. He was naturally a good feeder and liked good things; the foreign *cuisine* was not to his taste, and he could rarely obtain a meal to his order. Everyone must have known friends, if he has not suffered in his own person, affected by strange viands. In spite of the variety of dishes, the perpetual iteration of the same sauces to accompany what the *ménu* may please to call fish, flesh, or fowl, produces at last absolute disgust, until the appetite altogether fails, the tongue becomes coated, and a change of residence is absolutely necessary. In Mr. Forster's case there were two precedents exhibiting the ill effects of foreign diet. In the last and fatal instance he remained abroad until he absolutely ate nothing, fell into a state of inanition, and then took a journey of thirty-six hours in the bitterest weather. It may be remembered, too, that his character was such as was likely to make him suffer more than persons of a placid disposition. Although an amiable man and good-natured to an extreme, so that he was never so happy as when he was regaling his friends around him, he was imperious. In an English hotel his presence was soon known to host and waiters, and his dinner and wines were at his dictation and not theirs; or on a railway journey, station-master and guards soon found that they had a passenger to be respected. But in a foreign land he had to succumb. Often he could not get his meals *à la carte*, but was forced to sit down to the "filthy *table d'hôte*," and against his will be thrust into the last seat of a crowded railway carriage. He was thus liable to be in constant opposition, instead of accommodating himself to the novel surroundings. All these circumstances must be taken into consideration in discussing the cause of our friend's death. From what I knew of him, I believe the inanition caused by want of accustomed food and the annoyance of foreign manners were sufficient to account for his fatal illness. SAMUEL WILKS.

MEMORANDA AS TO MR. COOPER FORSTER'S ILLNESS.

BY JONATHAN HUTCHINSON, F.R.C.S.

The death, after a very short illness of an obscure nature, of one so highly esteemed and widely friended as Mr. Cooper Forster has naturally excited much and painful interest in professional circles. I had written out the following memoranda for my own use, but am induced by Dr. Wilks to offer them, with a few modifications, as an appendix to his own more valuable report. Dr. Wilks saw much more of our mutual friend during his last week of life than I did, and the case was essentially a medical one. Anything that I can add must be taken as of value only in reference to the dermatological part of the case. It will be seen that, even with the negative light afforded by the necropsy, the illness remains one which it is difficult if not impossible to name. All will probably agree that, whatever the original malady was, the unfortunate journey home much hastened its fatal progress, but on other points opinions will doubtless differ widely. The case is in itself an important one, and, apart from the personality of its subject, deserves to be placed on record in detail.

On Wednesday evening, Feb. 24th, I received a telegram from my friend, asking what time he could see me in the morning, his message implying that he intended to call on me. I at once sent a reply to Grosvenor-street, saying that I would call on him if he would let me know when he reached home. To this I had no reply, and consequently I did not call to see him till the afternoon. He had never opened my letter, having felt too ill to do so. On Thursday, February 25th, I called and saw him in bed. (Dr. Wilks had seen him before I did on the same morning.) He told me that he had got an eruption. He took off his night-shirt and showed me an eruption of brown papules on his chest and back. They were from the size of split peas to that of sixpences, slightly raised, and well margined. Some of them were rather smooth in the middle, but none of them actually glossy. On the right shoulder was one larger than the rest, as big as a halfpenny, and considerably raised in the centre. Most of them were rather thicker in the middle than at the margins, and shelved down gradually. He had few or none on the abdomen and limbs. He told me that the eruption had first been noticed on his chest before he left home for Cannes. He had left home on Jan. 21st, so that this would have been about six weeks ago. He said that whilst at Cannes and Nice he had been losing flesh and strength, had had a poor appetite, and had been "dreadfully constipated." He had travelled home alone, and I understood that his motive was to get advice as to his eruption, about which he was very anxious. He said that he had suffered much on his journey home, and had not been able to take any food. He looked very ill, but was perfectly clear in his mind. He got out of bed for my inspection of the eruption. I examined his throat and found no sores on the tonsils, but was struck with the red colour of all parts of his mouth—tongue, cheeks, palate, and fauces. I thought that his mouth must feel sore, but he assured me that it did not. It was not at this time dry, but simply very red. Dr. Wilks afterwards told me that it had been dry in the morning. He had been standing out of bed for a few moments for my inspection. The light was very bad—a foggy afternoon and a chamber candle. I suggested that his eruption looked a little like lichen planus. To this he replied that he had felt sure that I should call it "lichen planus." It will be observed by dermatologists that it did not closely conform to that disorder. I asked him whether he had worn any new vests, and he told me that he had, and that when he first noticed the papules he thought they must be due to the irritation of his vest, and had it changed. The spots, however, did not disappear, but continued to come out. At the time of my visit he had not used the thermometer, and I had not one with me. His pulse was then 110, at which he expressed surprise, and said it had never before been more than 80, and that he had "had neither rigor nor fever, but only felt desperately weak." He promised to use the thermometer in the evening, when he expected a second visit from Dr. Wilks. I advised him that, as no diagnosis could be made, he had better do nothing but keep quietly in bed and take light food. He had had some soup, but said that he had not the least appetite. I was to see him again by better daylight next morning. On Friday morning it was a dense fog, and I deferred my visit till the afternoon. On calling then it was still very dark, and I arranged to meet Dr. Wilks next morning, and did not go upstairs. On Saturday morning I met Dr. Wilks and Dr. Habershon. They had just been in his room, and as they suspected fever, and as it was deemed desirable to let our patient rest as much as possible, we agreed that I should not trouble him by further examination then, but that we should all meet on the next morning. On Sunday morning Sir James Paget was kind enough to join Drs. Wilks and Habershon and myself in consultation. Mr. Forster was looking much worse than when I had last seen him on Thursday afternoon. He was much more prostrate, and his tongue and mouth were so dry that he could scarcely speak so as to be understood. Yet he was perfectly himself, and quite acute in his remarks. The eruption on his chest and back was less conspicuous, but essentially the same as on Thursday. Some of the smaller spots on the upper part of the abdomen had been suspected to be those of typhoid, but there was really no definite distinction between them and others on his chest of the kind already described. He had taken an aperient, which had acted. He had been sick once or twice. He was too ill for us to make any very minute examination of the skin. He complained of pain in the left arm, and appeared to be sensitive to the slightest pressure on the humerus, just above the insertion of the deltoid. The skin looked red, and the arm a little swollen, but there was nothing positive. He flinched whenever the bone was touched, but no enlargement of it could be distinguished. We did not examine it much on account of his great debility. Just as we were leaving he reminded us that we had not looked at his throat. His mouth was everywhere quite dry, and sticky mucus hung about the pillars of the fauces. We all thought him very ill, and likely to die, but there was no reason to expect

such a rapid termination as that which followed. After this consultation I did not see him again, as it was deemed a medical case, but he was visited two or three times daily by his friends and colleagues, Dr. Habershon and Dr. Wilks. From what they have told me, I believe that he got rapidly weaker in spite of the free use of brandy, quinine, and fluid food. His intellect remained quite clear. His temperature was never (excepting once 103°) more than 102°, and his pulse often not 100. His tongue remained dry. On Monday morning he looked more depressed, and the unfavourable prognosis which we had all formed on Sunday was strengthened. At the evening visit on Monday he was so weak that his pulse flickered, and Dr. Wilks made a hypodermic injection of brandy. He was now clearly sinking. He died about 4 o'clock the next morning.

The post-mortem (on Thursday) was chiefly of interest in that it quite put aside the suspicion as to typhoid. The small intestines were most carefully examined, and there was no trace of disease. The most conspicuous condition found was acute hæmorrhagic congestion of both kidneys. There was some serous fluid in both pleural cavities and congestion of the lower and posterior parts of the lungs. These conditions had probably developed during the last few hours of life. No jaundice had been noticed during life, but there was at the necropsy yellow staining of all the viscera, which suggested its commencement. The heart was healthy. I am sorry that I cannot give a more exact account of the eruption than I have done. My first inspection of it was by candle-light in a fog, and as I expected to have other opportunities I did not keep him long uncovered. I believe that there were a few spots on the forearms, and Dr. Habershon told me that he had noticed one which was scaling. The spots were certainly not the smooth glossy ones of lichen planus, nor did they observe the rule as to uniformity of size.

It seems certain that Mr. Forster was in his usual health when he left for the Continent. Of this I have been assured by several who saw him just before he started. Whilst away he failed in appetite and strength, and used to complain of being weary, and was occasionally sick. That he was not very ill even when he started on his return journey may be assumed from the fact that he elected to travel alone, and that he left his family there. His reason for hurrying home was not that he felt very ill, but that he was anxious about his eruption and did not wish to consult anyone abroad. That his journey did him great harm there can be no doubt. It was performed in extreme discomfort. He was unable to take food or to sleep, and the weather was very cold. When he reached his house he looked like "a man stricken for death," and could only just manage to get upstairs. The one only objective symptom up to this date had been the eruption on his chest and back. This had begun before he left England, but had increased during his stay at Cannes. I cannot escape the conviction that this eruption was an important part of his illness. It was a very peculiar one, almost limited to his chest and shoulders. I think there was none on his lower extremities, and very few, and very small, spots on his abdomen. It had developed slowly, and there had been no glandular swellings and no sore-throat. Next to the rash the most conspicuous condition was the red and dry mouth. His tongue (on Sunday) did not show, as is often seen, a dry streak in the middle, but was as dry as it could possibly be in every part, rough, and red. Yet he would not admit that his mouth was sore. His temperatures were never very high (102°). His pulse did not quicken or fail in power at first at all in keeping with his appearance of prostration. It was only within twelve hours of his death that his pulse materially failed. He had noticed this himself, and told me that it had never been more than 80. My impression is that the case was one in which a patient, in whom a condition allied to lichen planus was developing, was subjected to cold and fatigue in a long journey, with the result of inducing local congestions and of greatly intensifying the constitutional disturbance which now and then attends this disease. Hebra at first taught that lichen ruber was always fatal, and only changed his opinion when he found the good results which followed the use of arsenic. Death, however, occurred, not quickly, but after an illness of some months or a year, and after the skin had become very extensively involved. Some cases of pemphigus are attended from the first by great prostration, and many would end speedily in death were it not for the use of arsenic. In such cases, however, the extent of skin affected is always much greater than it was in Mr. Forster's case. The redness and dryness of the mouth suggested that acute stomatitis was about to develop, and that the case might be allied to certain rare affections in which a very sore mouth is coincident with a skin eruption, and there is a definite tendency to death by prostration. It may be suggested that some poison (fever or other) was received during his stay in France, but it must be replied that the eruption was undoubtedly present before he left home. As to the real cause of acute pemphigus or lichen planus we know nothing. That it probably concerns the nervous system rather than the blood may be inferred from the manner in which arsenic cures them. Of cases in which a sore mouth was coincident with a skin eruption, and either ended fatally or threatened to do so, I have seen five or six examples. Four were in men about Mr. Forster's age, and two of these died at the end of five months. The eruption on the skin of these was mixed, being like pemphigus in part, and in part papular, with tendency to papillary growth. In another case (which recovered) only a few papules showed themselves on the backs of the hands. If Mr. Forster's case be one of this class, it is to be noted that the eruption preceded the stomatitis, and that both were insignificant in comparison with the constitutional depression. Indeed, it cannot be said that Mr. Forster ever had stomatitis; his mouth was simply congested and dry. That the eruption was in some connexion with the constitutional disturbance is a conclusion favoured by the facts of his stay at Cannes. As early as Feb. 4th he had complained of weakness after a walk, and had vomited, and from this date he had lost flesh and strength. His eruption had begun to show itself before this, and was increasing as his loss in health increased.

The necropsy was made by Dr. James Anderson and my eldest son, none of Mr. Forster's more intimate friends feeling able to be present. They were not told more than that the case was supposed to be one of typhoid, and hence the omission to examine the arm. Excepting at the visit on Sunday, however, the arm had not attracted any attention, nor had any further complaint of pain in it or elsewhere been made. The following are notes of the post-mortem as written out at the time:—

"Body bile-stained; abdomen slightly distended; yellowish from decomposition. Subcutaneous fat considerable. Lungs extremely œdematous and congested; left base almost airless. Effusion of about 15 oz. into left pleural cavity; a few ounces into the right one. Heart-muscle fairly nourished. Valves healthy. No effusion into pericardial cavity. Endocardium very much bile-stained. Abdomen: Dense adhesions of omentum and of liver to anterior abdominal walls. Tag of omentum adherent to abdominal wall in front of cæcum not recent. Some old adhesion between parts of small intestine. Considerable old inflammation in neighbourhood of gall-duct, with some recent retro-peritoneal hæmorrhage. Foramen of Winslow closed. Nothing abnormal was found in the small or large intestine, except that the wall of the latter was much sodden, but showed no ulceration. Kidneys large; capsules stripped easily; surface showed irregular congestion, and hæmorrhages with a few cysts containing blood-stained fluid. On section the cortex was extremely soft, breaking down at points, and studded with numerous milary hæmorrhages and a few as large as a pea. Pyramids congested. Changes most marked in right kidney. Liver bile-stained and fatty; no hæmorrhage; no evidence of distension of ducts; no calculi in gall-bladder. Spleen large, dark, and of medium consistency.

(Signed) "JAMES ANDERSON, M.D.
"JONATHAN HUTCHINSON, JUN., F.R.C.S.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL.—At the thirty-seventh annual meeting of the governors of this institution on the 9th inst., it was reported that the number of in-patients treated during the past year amounted to 1908, as against 1899 in the preceding year; the number of out-patients was 11,778. The income amounted to £7150.

NEW MEDICAL SOCIETIES IN RUSSIA.—Two new Medical Societies have recently been started in Russia. One is for the study of syphilis and dermatology, and has already met several times, the president being Prof. B. Tarnovski, and the vice-president Prof. Polotebnoff. The other, devoted to ophthalmology, is in process of formation.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

River Tyne Port.—The reports from this port district afford an excellent example of systematic sanitary work, and of a state of preparedness for such emergencies as may arise in an important port. No less than 13,530 vessels were inspected, and structural improvements were ordered to be carried out in 330 cases. Amongst the vessels entering the port were 563 coming either directly or indirectly from ports infected or suspected of cholera, and exceptional care was exercised with regard to these, especially with reference to the question of water-supply. A new floating hospital is being erected in the port to replace the existing one, which is, by reason of old age and otherwise, becoming insufficient for the purposes of the district, and during 1885 eleven patients, all of whom recovered, were placed under isolation. On the whole Mr. Henry Armstrong's report is a very satisfactory one.

Bedford Urban District.—Notwithstanding a severe fatality from whooping-cough and from measles, the death-rate for this borough was slightly under 18 per 1000 during 1885; the deaths under one year being at the rate of 153 per 1000 registered births. The zymotic rate was heavy, reaching as it did 3·9 per 1000. Small-pox was introduced into the town, but by the aid of vaccination and isolation in hospital it was checked. Bedford is by no means free from the anti-vaccination movement, and hence Dr. Prior advises his readers to study the story told in the last report of the Medical Officer of the Local Government Board about the prevalence of small-pox in Kilmarnock in the last century. Such a study should suffice to show what small-pox was before the introduction of vaccination. He also refers to the experience of Leicester as inapplicable to Bedford, on the ground that in the former town the authorities go beyond the provisions of the law and quarantine all households in which a case of small-pox may appear. We may add to this that deaths from small-pox in the Leicester hospital are not registered as occurring in the borough, but in a totally different district, where the hospital is situated. Diphtheria, which has by no means given up its hold on this neighbourhood, caused ten deaths, and Dr. Prior promises to discuss the subject in a separate report. It is satisfactory to note that the phthisis death-rate was during 1885 the smallest recorded for twenty-five years. Considerable improvements are in progress in connexion with the public water service, and a large amount of valuable sanitary work continues to be carried out in the district.

Shipley Urban District.—Mr. Ellis reports that 22 isolated cases of scarlet fever occurred, and he points out that it is by no means an easy thing to prevent the spread of this disease in a district where so many children are massed together in public elementary schools. This we admit, especially where means of isolation are not resorted to, and it seems curious that the report proceeds to state that no cases of infectious disease arose necessitating removal to the Fever Hospital. But with the aid of the school authorities the results appear to have been fairly satisfactory. The general sanitary circumstances of the town are, according to Mr. Ellis, in a satisfactory state, the record of the inspector of nuisances is a good one, and the death-rate for 1885 was 16·2 per 1000 living.

Guisborough Combined District.—Small-pox was imported into Guisborough during the course of the year reported on, and no provision being made by the sanitary authority for the isolation of first cases of infectious diseases, the infection spread from three centres and became epidemic, no less than 42 houses and 130 persons being attacked. At Loftus, on the contrary, the same disease was at once isolated, and no spread resulted. The birth- and death-rates for 1885 were 35·0 and 17·7 respectively. The death-rate had varied from 13·9 in the Saltburn urban district to 19·0 in the Skelton and Britton district.

Ashton-in-Makerfield Urban District.—Scarlet fever was almost continuously present in this district during the past year, the disease having commenced in the previous year. The deaths which resulted were 24 in number, and Mr. Hannah states that the usual preventive measures were adopted. The only hospital then available seems to have been a temporary one, which stood in much need of repairs, and it is not stated whether it was used or not during the epidemic. We fear not, for in February, when scarlet fever was already fatally prevalent, we learn that the hospital was "dispensed with." But a new hospital is apparently approaching completion, and better success in the direction of prevention may therefore be anticipated in the future. The general death-rate was 21·6 per 1000.

Holsworthy Rural District.—This rural district has, in parts, an unnecessarily high death-rate, it being in excess of that for England and Wales, and that for Holsworthy parish reaches 25·6 per 1000. Mr. Linnington Ash has often advised the provision of means of isolation, and in pointing out how small-pox, when once imported, spread amongst a crowded aggregation of navvies, he disclaims all responsibility for the untoward result. Not even a barn could be procured for the isolation of the first case, and yet no provision was made in advance. Then a temporary hospital was erected, which, if precedent be followed, will prove all but useless for further emergencies. In all, the epidemic cost over £300. Further improvements have been carried out as regards the water-supply of the district, but in Holsworthy itself the supply available cannot be regarded as meeting the requirements of the place. A good deal of routine sanitary work is in progress, and the report is made very complete by the addition of a number of excellent statistical tables, which must have considerable local interest.

Stroud Rural District.—Enteric fever at Stonehouse is referred to in this report, and it is lamentable to read of the loss of valuable lives there, when all that was needed to prevent the loss was prompt action in the directions indicated by the medical officer of health. Mr. Partridge shows conclusively how great is the need of improved water-supplies in various portions of the district. That of Painswick is chiefly from polluted wells, although this has been reported before. At Horsley matters are much the same, whereas a good supply is allowed to run to waste. It seems, in short, evident that there is something very wrong in this matter of water-supply, and that risk of disease and death is in consequence imminent. If this further report fails to move the sanitary authority to energetic action, the case is one in which the inhabitants should consider whether they would not do wisely to make a definite complaint of default under Section 299 of the Public Health Act, 1875.

Thingoe Rural District.—From this report we gather that, both as regards the prevention and extension of disease and in the matter of providing permanent remedy for nuisances calculated to injure health, steady work is continuously carried out. Mr. Kilner is, however, very naturally not content with some of the means of drainage which lead to the pollution of the river, but a line of action tending to diminish the resulting evil has been adopted. The birth- and death-rates for 1885 were 27·2 and 15·2 per 1000 respectively.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5485 births and 4630 deaths were registered during the week ending March 6th. The annual death-rate in these towns, which had been equal to 24·4 and 24·2 per 1000 in the preceding two weeks, further rose last week to 26·6, and exceeded the rate recorded in any week since March, 1883. During the first nine weeks of the current quarter the death-rate in these towns averaged 23·5 per 1000, and was 1·0 below the mean rate in the corresponding periods of the ten years 1876–85. The lowest rates in these towns last week were 17·9 in Brighton, 18·0 in Hull, and 20·4 in Oldham. The rates in the other towns ranged upwards to 34·0 in Preston, 34·6 in Wolverhampton, 35·4 in Plymouth, and 36·4 in Blackburn. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 425 and 385 in the previous two weeks, rose again last week to 403; they included 171 from whooping-cough, 101 from measles, 42 from diarrhœa, 31 from "fever" (principally enteric), 28 from scarlet fever, 27 from diphtheria, and 3 from small-pox. No death from any of these zymotic diseases was recorded last week in Wolverhampton; whereas they caused the highest death-rates in Portsmouth, Bolton, Plymouth, and Blackburn. Whooping-cough caused the greatest mortality in Plymouth, London, and Portsmouth;

measles in Bolton, Plymouth, and Blackburn; scarlet fever in Birkenhead; and "fever" in Cardiff. The 27 deaths from diphtheria in the twenty-eight towns included 19 in London and 5 in Liverpool. Small-pox caused 3 deaths among the residents of London, 2 in Liverpool, and 1 in Brighton, and not one in any of the twenty-five other large towns. The number of small-pox patients in the metropolitan asylum hospitals situated in and around London, which had been 10 and 15 on the preceding two Saturdays, had declined to 7 at the end of last week; and no new case was admitted to these hospitals during the week, the admissions in the preceding two weeks having been 2 and 7. The deaths referred to diseases of the respiratory organs in London, which had increased in the preceding six weeks from 477 to 677, further rose last week to 745, and exceeded the corrected weekly average by 294. The causes of 96, or 2·1 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Plymouth, Derby, and Birkenhead. The largest proportions of uncertified deaths were registered in Sheffield, Oldham, Halifax, and Bolton.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been equal to 22·3 and 23·5 per 1000 in the preceding two weeks, further rose to 24·9 in the week ending March 6th, but was 1·7 below the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 17·1 and 17·4 in Aberdeen and Dundee, to 25·2 in Paisley, 30·1 in Glasgow, and 31·1 in Perth. The 614 deaths in the eight towns showed a further increase of 34 upon the numbers in the previous two weeks, and included 19 which were referred to whooping-cough, 7 to "fever" (typhus, enteric, or simple), 7 to diarrhœa, 4 to scarlet fever, 3 to diphtheria, 3 to measles, and not one to small-pox; in all, 43 deaths resulted from these principal zymotic diseases, against 46 and 51 in the preceding two weeks. These 43 deaths were equal to an annual rate of 1·7 per 1000, which was 0·6 below the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had been 13 and 19 in the preceding two weeks, were again 19 last week, of which 17 occurred in Glasgow. The 7 deaths referred to "fever" showed a slight further increase upon the low numbers in recent weeks, and included 4 in Glasgow. Three of the 4 deaths from scarlet fever, 2 of the 3 from diphtheria, and all the 3 from measles, were returned in Glasgow. The 7 deaths attributed to diarrhœa, of which 3 occurred in Edinburgh and 2 in Glasgow, were 2 below the number in the corresponding week of last year. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had increased in the preceding four weeks from 135 to 159, further rose last week to 170, and exceeded the number in the corresponding week of last year by 51. The causes of 73, or more than 11 per cent., of the deaths in the eight Scotch towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 38·6, 31·8, and 30·4 per 1000 in the preceding three weeks, further declined to 30·1 in the week ending March 6th. During the first nine weeks of the current quarter the death-rate in the city averaged, however, no less than 32·0 per 1000; the mean rate during the same period did not exceed 23·9 in London and 18·3 in Edinburgh. The 204 deaths in Dublin last week showed a further decline of 2 from the numbers returned in the preceding three weeks, and included 15 which were referred to the principal zymotic diseases, against 26, 20, and 22 in the previous three weeks; 10 resulted from whooping-cough, 4 from "fever" (typhus, enteric, or simple), 1 from diarrhœa, and not one either from small-pox, measles, scarlet fever, or diphtheria. These 15 deaths were equal to an annual rate of 2·2 per 1000; the rates from the same diseases being 2·8 in London and 1·6 in Edinburgh. The fatal cases of whooping-cough, which had been 16 and 18 in the previous two weeks, declined last week to 10. The 4 deaths referred to "fever" showed an increase of 2 upon the number returned in each of the two previous weeks. Five inquest cases and 4 deaths from violence were registered, and 60, or nearly a third, of the deaths were recorded in public institutions. The deaths of infants showed a decline, whereas those of elderly persons were more numerous than in either of the preceding two weeks. The causes of 17, or more than 8 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

WAR OFFICE.—Army Medical Staff: Surgeon-Major Hopetoun Currie Collier is granted retired pay, with the honorary rank of Brigade Surgeon.

ADMIRALTY.—In accordance with the provisions of Her Majesty's Order in Council of April 1st, 1881, Inspector-General of Hospitals and Fleets Henry Fegan, C.B., M.D., has been placed on the retired list.

The following appointments have been made:—Fleet Surgeon Henry Hadlow, to the Royal Naval Hospital, Chatham; Surgeon Arthur W. Russell, to the *Hyacinth*; Surgeon Horatio S. R. Sparrow, to the *Polyphemus*; Surgeon Henry A. W. Richardson, to the *Osprey*; Surgeon Evan St. M. Nepean, to the *Triumph*; and Surgeon William W. Jacobs, to the *Royal Adelaide*.

RIFLE VOLUNTEERS.—1st Volunteer Battalion (the Duke of Cornwall's Light Infantry): Honorary Assistant-Surgeon Andrew Harvey resigns his commission.—2nd Renfrewshire: James Tomlins, Gent., to be Acting Surgeon.—3rd Volunteer Battalion (the South Staffordshire Regiment): Surgeon John Fraser, M.D., is granted the honorary rank of Surgeon-Major.

Correspondence.

"Audi alteram partem."

DEATH FROM CHLOROFORM.

To the Editor of THE LANCET.

SIR,—I beg to forward you particulars of the recent death here from chloroform. The Lady Flora Wilmot, aged twenty-five years, had been under my care for various minor ailments during the last eighteen months. With the exception of a gouty tendency, her constitution was, I believe, sound. On Wednesday, Feb. 24th, I was asked to meet her at Mr. Scott's residence at Swansea (her dentist) for the purpose of administering an anæsthetic for the extraction of the right molar tooth. Nitrous oxide gas not being available, I gave chloroform in preference to bichloride of methylene or ether (both of which I had by me), because for the purpose I considered it the best anæsthetic, and also because her ladyship, having taken it two or three times before, expressed a preference for it. Everything about the chest being perfectly loose, and the patient sitting in the dentist's chair, less than a drachm was sprinkled on lint in an open inhaler, which the gag kept from closely fitting round the mouth and nose. A similar quantity of chloroform was added a second and third time before perfect anæsthesia occurred. The tooth was then removed, and recovery followed without a bad symptom. The patient had taken it capitally, and in all two drachms had been given. Five days afterwards (March 1st) I again administered chloroform for Mr. Scott (this time at the patient's residence) to remove the adjoining bicuspid tooth. The patient was seated in a low deep-backed well-pillowed easy chair, and was therefore more reclining than on the former occasion. The result of the chloroform before having been so satisfactory, I again administered it in the same way, and, as before, two drachms were given in all, with a similarly good result. The inhaler having been removed, Mr. Scott took out the tooth, cleaned his forceps, and stood by the patient's side. I remarked, "I hate giving chloroform for you dentists because you will have your patient sitting up." This led to a reply from Mr. Scott, who then poured out a tumblerful of water and asked the patient to rinse her mouth, as the gums were bleeding. No water was taken, and I observed she was not sufficiently conscious yet, and we still stood by the patient. I had during this time one finger on the temporal artery, whilst with the other hand I was raising the eyelid and watching the pupil, which, having been dilated during unconsciousness, had become normal and the conjunctiva sensitive. Suddenly the pupil became

again widely dilated, I could no longer feel the pulse, and the face became blanched. The chair was immediately turned back, the head lowered to the ground, and the body and limbs raised. Nitrite of amyl sprinkled on a handkerchief was applied to the nose, and, although the heart could not be felt beating, the breathing still continued for, I should say, at least two minutes. Artificial respiration, drawing out the tongue, and lifting the jaw forward, were of no avail—not the slightest sign of recovery followed. A post-mortem examination was refused. Yours obediently,

Swansea, March, 1886. J. FARRANT FRY.

THE ETIOLOGY OF PROSTATIC ENLARGEMENTS.

To the Editor of THE LANCET.

SIR,—In an interesting communication by Mr. Reginald Harrison upon the above subject in your issue of the 6th inst., we read that he believes a depressed trigone permits the accumulation of residual urine, induces the hypertrophy of the inter-ureteral bar, and thus is the immediate cause of prostatic hypertrophy. He states further that this hypertrophy is localised to the vesical floor, and contrasts its limited area with the general hypertrophy following stricture. I would ask, Is it physiological that a hollow muscular viscus under the control of one definite centre (Budge, Gianuzzi) can contract so often in a limited section of its small area so as to produce hypertrophy of that section, and of that alone? Again, I would submit that the inter-ureteral bar is mostly made up of muscle bundles derived from the sides and back of the bladder itself. Is it reasonable to suppose that one part of those bundles can hypertrophy without a similar change in the remainder of those bundles? I would mention that in an examination of over 400 fresh bladders I have never met with hypertrophy of the inter-ureteral bar either in prostatic enlargement, stone, or stricture, unless there was a coexisting and corresponding hypertrophy of the entire viscus. But a theory like that on which I thus venture to comment, emanating from one so well known as Mr. Reginald Harrison, upon a subject so controversial and so important, demands serious consideration and discussion. He would be conferring a real benefit upon his London *confrères* were he to bring forward his views, and the specimens upon which he mentions they are based, at the Pathological Society.—I remain, Sir, faithfully yours,

E. HURRY FENWICK.

George-street, Hanover-square, W., March, 1886.

INVERSION OF THE UTERUS.

To the Editor of THE LANCET.

SIR,—Dr. Barnes, in THE LANCET of Feb. 27th, appears to resent my remarks in a previous number, where I endeavoured to show that incision of the os previous to reducing an inverted uterus had been practised before 1868. Dr. Pratt, in the *Medical Times and Gazette*, thus writes in March, 1868, when speaking of the operation referred to above:—"This mode of treatment is not new, although not mentioned by Murphy, &c.....but Dr. Wassiege of Liège says that it is the only legitimate, as it is the most effective, plan." This, I think, proves that the operation must have had an established reputation abroad before 1868, the date of Dr. Barnes' first operation. Certainly, I had no wish, nor could I succeed if I had, to detract from Dr. Barnes' high merits, and I feel rather aggrieved that the "valuable" Digest should be described as referring chiefly to "three medical journals." Had it fallen to the fate of Dr. Barnes to keep up the Digest, week by week, month by month, and year by year, he would soon have discovered that it embraced, in addition to the "three principal medical journals," seven or eight others, which secures a reference to every subject, either in English or foreign literature, that is of practical value to the medical profession.

I am, Sir, yours faithfully,

RICHARD NEALE, M.D., Lond.

Boundary-road, N.W., March 3rd, 1886.

THE South Hornsey Local Board are endeavouring to obtain from the Ecclesiastical Commissioners their interests in Clissold Park, with a view to its preservation as an open space for the use of the public.

MANCHESTER.

(From our own Correspondent.)

OWENS COLLEGE.

AT the half-yearly meeting of the Court of Governors of the Owens College, held on the 2nd inst., it was reported that satisfactory progress was being made with the work of extension of the College buildings, which has been going on for the past two years, and that the Coupland-street block will be ready for use at the beginning of the session 1886-7, and the museums will be ready for the reception of the collections in natural history and geology in the spring of 1887, and thus be complete prior to the visit of the British Association in that year. The façade to Oxford-road presents an imposing appearance, and the tower, now almost completed, stands out a commanding landmark for a considerable distance round, while within the grounds the quadrangle which will be formed when the entire plans are carried out is complete on three of its sides. The report stated that there were at present a total of 1244 students in the various departments of the College. The Council had accepted with much regret the resignation of Sir Henry Roscoe as Professor of Chemistry, owing to his recent election as member of Parliament for the southern division of the city. It was resolved to establish an engineering laboratory in the College, at a cost of £6000.

SIR WILLIAM ROBERTS.

The meetings of the Medical Society are not often graced with the presence of Sir William Roberts, but on Wednesday last he gave a very interesting *resumé* of some experiments he had made upon the solubility of gouty deposits (the bi-urate of soda) in various solutions of soda, potash and lithia salts. As usual with him, the work was on the scientific side of medicine, and yet not without a direct bearing upon the practice of the same. Sir William has been much more before the public the last few days than is his wont; on Monday last he was presiding at the annual Welsh dinner held on St. David's Day, and on Saturday a complimentary dinner was given to him on the celebration of the honour of knighthood recently conferred upon him. Dr. H. Simpson was in the chair, and most of the leading members of the profession in the town and districts were present, amongst the visitors being Dr. Buchanan of the Local Government Board.

PROVIDENT DISPENSARIES.

At the annual meeting of the Provident Dispensaries it was stated by the chairman that 20,000 persons had joined these institutions, and thus had been rescued from going begging to medical charities, and also as a result of ten years' work the proportion of persons seeking gratuitous medical attendance at our hospitals who were in a position to pay for the same had been reduced from 42 per cent. to 12½. The subscriptions of members had amounted during the past year to £3560, of which £2000 had been paid to the medical staff. Thus much from the provident dispensaries' point of view; but there have been several communications during the past few days from medical men and others tending to show that, if they have been the means of preventing abuse of the hospitals, the dispensaries themselves are not altogether without reproach, seeing that no limit is placed upon the income of those entitled to join them; and that, as a matter of fact, many do join who are well able to pay the ordinary medical fees charged to the working classes, and thus great injustice is done to those members of the profession whose work is perhaps the heaviest, and certainly the worst paid.

LOCAL MEDICAL CHARITIES.

A very interesting little *brochure* has lately been printed by the Infirmary Committee relating to one of its allied branches — the Barnes Fever Hospital, — compiled by Dr. Renaud, formerly one of the physicians to the institution, and now consulting physician to the infirmary. He briefly traces its history, from the formation of the first fever house in 1796, through all its various changes down to the present time. Much of the history consists of personal reminiscences, and well deserves the permanent record thus given to it. The last additions to this hospital have but recently been finished, consisting of two new blocks of wards and a large nurses' home, the latter of sufficient size

to accommodate fifty inmates, the total cost of these extensions being something like £10,000, and still further outlay is, it is understood, shortly contemplated. At another branch of the infirmary—the asylum at Cheadle—the completion of the extensions of the buildings were celebrated on the 25th ult. by a fancy dress ball, at which, in addition to all those of the patients who were fit to mix together, a number of invited guests, including several members of the staff, were present. The dancing took place in the handsome new recreation-room, which was prettily decorated, and the whole scene was one of exceptional brilliancy. The Hospital for Consumption is advancing each year in importance and in the amount of work done by it. At the annual meeting, in common with all the other charities, the committee ask for increased support to meet additional expenses, and appeal for an increase of no less than £1000 per annum for working expenses. The committee has been fortunate in obtaining the services of Dr. Simpson and Mr. Hardie as physician and surgeon respectively in place of Dr. Gamgee and Mr. Young, who have resigned during the past twelve months. The total amounts received from the Hospital Saturday and Sunday Funds so far are £6751—a sum below last year's collections; but this may be increased considerably yet, as the whole of the contributions have not yet come in.

Manchester, March 8th.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

NEWCASTLE CHILDREN'S HOSPITAL: MUNIFICENT OFFER.

THE annual meeting of the above hospital was held lately, under the presidency of Sir W. G. Armstrong, C.B. The report stated that the number of in-patients treated had been 138, as compared with 156 in 1884; the decrease in the number was due to the fact that the hospital had been twice cleared of its inmates during the year, on one occasion owing to an outbreak of measles, and once during the summer to allow of the repainting and cleaning of the whole building. The number of out-patients was 2483, as compared with 2087 in 1884. It was stated in the medical report that the 2483 out-patient cases involved 7000 separate consultations by the physicians or surgeons. Mr. John Fleming, a governor of the hospital and a solicitor in this city, in moving the adoption of the reports, referred to the unhealthy situation of the hospital, situated as it is in the midst of a very poor and overcrowded population; and as a convalescent home was an acknowledged want in connexion with the hospital for the perfect recovery of the children, he had thought it would save expense if a new hospital were to be built in an airy situation, and thus combine the advantages of hospital and convalescent home in one building. He further offered to purchase a site for the new hospital, and to build and furnish it complete; and, taking into consideration the growing requirements of the city and district, he thought the new hospital should be large enough to receive from sixty to eighty in-patients. Mr. Fleming wishes to build the hospital as a memorial of his late wife, and that its erection should be at once commenced, so that the next annual meeting might be held in the new building. Mr. Fleming's munificent offer was gratefully accepted, and in the discussion which followed it transpired that the present hospital building was freehold, and might be sold at an enhanced value for business purposes, and thus augment the income of the hospital. The Children's Hospital has been in operation here for about twenty-three years, and at first began on a very small scale. Dr. William Murray and Mr. Joseph Fife were the first medical attendants. The former is in active practice as a physician here, but the latter retired a few years ago. A good deal of the popularity of the hospital has been owing to the energy with which both these gentlemen undertook the duties. It had a good start, and has never flagged since. I regret that the medical founders were not mentioned at the meeting.

OPIUM AMONG MINERS' WIVES.

According to Dr. O'Hanlon of Spennymoor, the use of opium in the mining districts of the county of Durham would appear to be on the increase. At the last meeting of the local board, in his report for 1885, he referred to the excessive use of intoxicants as being a great source of disease in the town, likewise the chewing of tobacco and the use of narcotics in the form of opium and laudanum. "Few people," he said, "were aware of the enormous consumption of opium among miners' wives; they were left at home for a long time alone and taught each other the habit."

A FOURTEEN-YEAR-OLD MOTHER.

At the Stockton Police Court a man aged forty-four was charged, under the Criminal Law Amendment Act, with assaulting Clara Wilson, aged fourteen. Lately the girl gave birth to a child, and on being questioned she stated that the defendant (who was remanded) was the father.

Newcastle-on-Tyne, March 8th, 1886.

GLASGOW.

(From our own Correspondent.)

DISCUSSION ON CANCER.

THE most important event in this session of the Pathological and Clinical Society has been the discussion on cancer. It began with a demonstration of the various forms of malignant growth, illustrated by over a hundred microscopes and numerous casts, specimens and diagrams, so arranged as to show the structure and mode of extension of cancers. The discussion proper lasted for several nights, and was carried on not only by local pathologists and surgeons, but also by some from other parts of the country, amongst whom was Mr. Jonathan Hutchinson. It forms a notable contribution to the literature of the subject.

STUDENTS' UNION.

The students of Glasgow University are remarkably fortunate in their day and generation. A movement was set on foot among them at the beginning of last year for the establishment of a union, and a committee was appointed to further the scheme. Designs for a building, consisting of a hall capable of seating 400, with smaller rooms for the meetings of affiliated university societies, have already been prepared, the estimated cost being from £5000 to £6000. The main difficulty was want of funds. This has been got over, however, and the movement has received a great impetus through the announcement, recently made, that a gentleman, whose name is in the meantime withheld, a medical graduate of the university, has promised a sum of money sufficient to defray the cost of erecting the building. Generosity of this kind is as commendable as it is rare. One point which is much discussed among the students has reference to the site most appropriate for such a building. There is a pretty general feeling in favour of some situation more central than the university grounds, one nearer the localities where the majority of the students live, for the Scotch students, unlike English university students, do not reside in college.

DR. B. W. RICHARDSON'S VISIT.

Glasgow has recently been favoured with a visit from Dr. B. W. Richardson, made under the auspices of the British Medical Temperance Association. In the course of his visit he delievered two lectures. In the first of these, a public lecture, Dr. Richardson discoursed eloquently on the progress of sanitary science even during his own lifetime, and on the part which temperance played as a sanitary measure. The picture he drew of a town ideally perfect in sanitary matters, with its comparative freedom from disease, its low death rate (9 per 1000), and the long duration of life therein (105 years it ought to be), ended by a peaceful and painless process of euthanasia, were very striking; and no less striking was the picture he drew of the effect on such a community of the introduction of intemperance in the use of alcoholic liquors. His second lecture was to students, and dealt with the more scientific and medical aspects of the action of alcohol. While condemning the use of alcoholic liquors as beverages, he claimed and affirmed the right of the physician to use alcohol as occasion demanded in the treatment of disease.

Glasgow, March 9th, 1886.

THE first annual meeting of the subscribers to the Portsmouth Eye and Ear Infirmary was held on the 23rd ult., when a highly satisfactory report was presented by the committee.

IRELAND.

(From our own Correspondent.)

DUBLIN HOSPITALS COMMISSION.

LAST week Mr. Thomson, one of the surgical staff of the Richmond Hospital, gave some very valuable evidence before the Commissioners, bearing on the subject of the proposed amalgamation of certain of the Dublin hospitals. He stated that he was entirely in favour of the principle of amalgamation in Dublin, and considered that the Richmond, Whitworth, and Hardwicke ought to be amalgamated with Steevens's Hospital, and a new building erected in the neighbourhood of Christchurch-place. Dublin, he believed, had too many hospitals as compared with its population of 250,000, having ten general hospitals and 919 beds occupied. In Liverpool, with 552,000 inhabitants, there are only four general hospitals and 613 beds; in Manchester, with a population of 393,000, two hospitals, with 440 beds; in Birmingham, with a population of 400,000, two hospitals and 440 beds. On all the hospitals £85,000 a year is spent, including the special institutions, while only £27,400 of that money goes to the maintenance of the patients. It follows that Dublin is over-hospitalled and over-medical-officered. In Mercer's Hospital, for 45 beds there are three surgeons and two physicians, or 9 beds to each; in the Meath, with 85 beds, with a staff of eight, there is an average of 10½ beds each; in Jervis-street, with 25 beds, there are seven surgeons and two physicians, or less than 3 beds each, or, taking 150 beds for the latter institution, 15 beds to each medical officer. In the House of Industry Hospital, with 150 beds and a staff of eight, there is an average of 19 beds; and in the Mater Misericordiæ an average of 27. Mr. Thomson thought that 1200 beds divided over four hospitals would be ample, and was of opinion that the money would be got partly from the grant and partly from the public. He would put the Mater Misericordiæ on one side—it was a sectarian hospital, was not in debt, and should not receive a share of the grant, being managed in the interests of a particular church; he objected also to the nursing being in the hands of any sisterhood. No doubt the advantages of amalgamating certain of the Dublin hospitals is manifest; but with an over-officered medical staff as exists at present, the difficulty would be as to which of the medical officers in each institution amalgamated should retire, and whether they would be entitled to any compensation for the share of the students' fees they at present receive. The subject is a difficult one, and a solution of the matter would be desirable in the interests of all concerned.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

Some time since, the President of the College, Sir Charles Cameron, suggested that the College ought to elect some honorary Fellows from amongst distinguished surgeons, as the existing honorary Fellows were, with one or two exceptions, military or naval medical men. This suggestion has been carried out, for at the last meeting of the Council they unanimously elected as Honorary Fellows the following:—M. Pasteur of Paris, Sir James Paget, Bart., Sir Joseph Lister, and Professor Huxley. The President, I am informed, intends giving a banquet in the College on April 28th, on the occasion of the unveiling of the Dease statue and the opening of the Butcher Museum, and his Excellency the Lord-Lieutenant has accepted the President's invitation to the banquet. It is hoped that some of the newly elected Honorary Fellows will be able to be present on this interesting occasion. The Council will next week elect a Curator of the Museums of the College, at a salary of £250 per annum, in the vacancy caused by the retirement of Mr. Abraham.

ROYAL UNIVERSITY OF IRELAND.

A meeting of Convocation of the Royal University of Ireland will be held on the 6th prox. to elect a member of the Senate in the vacancy which will then occur. Mr. Farrelly, whose term of office expires, will, it is expected, be a candidate for re-election, and will be opposed by Mr. Wm. Thomson, surgeon to the Richmond Hospital.

STUDENTS' AMBULANCE CORPS, BELFAST.

The first general meeting of the members was held last week in Queen's College, Belfast. The chairman having explained the objects of the meeting—namely, to elect a committee and two secretaries *pro tem.*, to organise the corps and make all necessary arrangements,—an election was held for office-bearers. It is stated that upwards of 100 students of the College have joined, and it is expected that drill and training will commence early in the summer.

A life-size portrait of Sir Charles A. Cameron, M.D., the President of the Royal College of Surgeons in Ireland, was last week presented to the Grand Lodge of Ireland by the members of the Masonic Lodge 25, of which Sir Charles Cameron is the efficient secretary.

Deputy Surgeon-General John Madden died at his residence, Rutland-square, on the 8th inst.

Thomas Barbor, M.D., of Castleview House, Carlingford, has been placed on the Commission of the Peace for the County Louth.

The late Mr. P. A. Smith bequeathed a sum of £200 to each of the following charitable institutions:—Mater Misericordiæ, Vincent's, Mercer's, Sir P. Dun's, Jervis-street, and Coombe Lying-in Hospitals. The City of Dublin Hospital has also received £100.

Dublin, March 8th.

PARIS.

(From our own Correspondent.)

PTOMAINES AND THE MICROBE THEORY.

AMONG the conclusions formulated by the various speakers who have taken part in the debate at the Academy of Medicine on the pathogeny of disease, those enunciated by Professor Verneuil seem to me the most admissible, as they are the most plausible. In response to the speakers who preceded him, M. Verneuil stated that he recognised two principal origins of general maladies: 1. The invasion by germs which penetrate into the organism from without, and which had their existence in cosmic media. 2. The contamination of the interior of the organism by waste tissues resulting from diminished, augmented, or perverted nutrition. In other words, the learned Professor adopts all which appears to him clearly demonstrated in the microbian theory, or in the theories borrowed from pathological physiology and biological chemistry. As regards the *rôle* of the organism itself in the manufacture of disease, no one perhaps more than M. Verneuil has directed attention to that subject—that is to say, the intimate connexion that exists between a disease-germ and the body which receives it, which is the constitutional states of pathologists. For diseases of physiological origin, the organism no doubt plays the principal *rôle*. For nosological or microbian diseases, the economy is reduced to accept, submit to, multiply or destroy, refuse or reject the germs, without being able of itself to create a single one at any time or in any condition whatsoever. Thus, Professor Verneuil does not in any case admit morbid spontaneity—that is, in the grammatical sense of the word,—as the alterations in *plus* or in *minus* of nutrition are never produced by themselves, which necessarily imply causes on the one hand and pathological specificity on the other; the latter would imply the existence in an absolute manner of beings altogether distinct from those which they invade, and this would lead to the conclusion that there cannot exist at the same time spontaneity and specificity.

DEATH OF DR. BOCHEFONTAINE.

I regret to have to report the death of Dr. Bochefontaine, chief of the laboratory of the Faculty of Medicine of Paris and of the Hôtel Dieu. His death is considered a great loss to science, as he was an indefatigable searcher for biological facts. He was an avowed adversary of the microbian theories, particularly those professed by Pasteur and Koch; and it will be remembered that he was so convinced of the non-contagiousness of cholera that during the epidemic of last year he swallowed a pill composed of the dejections of a cholera patient, and consequently some millions of the comma bacilli, from which he suffered no other inconvenience than a slight malaise. He was latterly engaged in some important researches respecting the real efficacy of M. Pasteur's anti-rabic inoculations, when death overtook him after an illness of three weeks. As he was a most daring experimenter, even upon his own person, it was bruited about that he had fallen a victim to some experiment. The fact is that he had been, as just stated, ill for

about three weeks, suffering from abscesses in the throat and jaws, resulting from decayed teeth, which ended in fatal periostitis. He was only forty-five years of age.

REPORT ON SUICIDES.

The official report on suicides for the Department of the Seine for the year 1885 gives the following results:—There were 642 suicides or attempts at suicide from January 1st to December 31st. During the preceding year there were 542. Firearms were the principal means adopted, of which there were 225 cases; of these there were 160 for Paris alone and 65 for the rest of the Department. There were 150 suicides by drowning, 88 by hanging, and 142 by asphyxia; the others were effected by precipitating themselves from windows, monuments, &c; 62 were effected by crushing or by poisoning. The principal causes assigned are reverse of fortune, failure in business, dissipated living, particularly when accompanied with the use of alcohol. Several cases of self-destruction occurred among youths, principally among collegians, and the causes given display a high degree of mental precocity or immoral training.

PROPOSED HEALTH EXHIBITION.

An exhibition of everything concerning hygiene is being organised by the Society of Public Medicine at Paris, and is to take place in the month of May next in a large building at the back of the Hôtel de Ville. This exhibition, exclusively of a scientific and technical character, will comprise all plans and models of constructions and of apparatus destined to ensure the salubrity of the ground floor, underground rooms of private habitations, of cheap houses, and public buildings, such as schools, hospitals, and asylums, theatres, meeting or lecture rooms, &c. The exhibition is placed under the patronage of the members of the institute, and of the Academies of Sciences and of Medicine, and also of the Government.

THE TREATMENT OF HYDROPHOBIA.

A commission appointed by the Academy of Sciences has decided upon the establishment of a *locale* in Paris for the treatment of persons bitten by mad dogs. It is to be called "Institut Pasteur," and is to be supported by public subscription. As it is intended to be international, subscriptions are solicited from all parts of the world.

Paris, March 10th, 1886.

NEW YORK.

(From our own Correspondent.)

QUARANTINE.

THE health officer of New York quarantine is paid by fees, the charge for each vessel being $6.50. The total fees per annum are believed to vary from $60,000 to $100,000. There is a movement in the Legislature to abolish the fee system and give him a salary of $10,000. The discussion has brought to light some interesting facts. In 1880, 7827 vessels entered this port, and the receipts of the health officer were $64,000, and of this sum $25,000 were paid for running expenses, leaving a net income of $39,000. In 1885, 5908 vessels arrived, being nearly 2000 less than in 1880, and making a diminution of over $12,000 in the emoluments of the office. If these statements are true, the office is not now so lucrative as has been supposed, for, being a political office, the party in power always lays the health officer under heavy contribution.

THE BOARD OF HEALTH.

The New York Board of Health has been one of the most reputable bodies in the Senate until recently, when its management fell into the hands of the politicians, and now its president is under indictment by the grand jury for receiving bribes for official acts. On his trial the jury stood eleven for conviction and one for acquittal. The effect of the change of administration is visible in every department of the service: officers have been multiplied, salaries incurred, and the duties have been performed with less and less vigour. Public confidence has been very much lessened by the scandal.

DR. ALFRED C. POST.

The death of Dr. Post, President of the Faculty of the University Medical College, at the age of eighty, removes from medical circles a most familiar figure. For half a century he was one of the most active surgeons of this city, and he did not relax in his work until the last week of his life. He seldom failed in his attendance at the meetings of the medical societies, and always took a very lively interest in subjects under discussion. He was as much gratified with every step in advance in surgery as the younger surgeons, and never grew old in the usual way of discarding without trial "new-fangled notions."

YELLOW FEVER INVESTIGATIONS.

A Bill has been introduced into Congress to provide for the appointment by the President of a Commission to proceed to Brazil to investigate the alleged discovery of a method of inoculating for yellow fever. Few physicians have any faith in the professions of Dr. Domingos Freire, and the Bill receives support only from medical officers of the southern quarantines, and especially that of New Orleans

SUDDEN DEATH OF EMINENT MEN.

There have been many sudden deaths of eminent men recently, and the subject is attracting the attention of medical men. Calfax, a former vice-president of the United States, fell dead in a railroad depôt while on a lecture tour. Hendricks, the Vice-President under the present administration, was recently found dead in his bed. And now comes the news of the death of John B. Gough, the temperance orator, who fell, with his arms raised, in the midst of a speech. General McClellan recently died suddenly, but he had been suffering occasionally from angina. Heart disease has proved to be the chief cause of these deaths.

New York, Feb. 22nd.

ROYAL COLLEGE OF PHYSICIANS.

AN extraordinary Comitia of the College was held on the 11th inst., Dr. J. W. Ogle, Vice-President, in the chair. Certificates in Hygiene were granted to Edgar English and John Frederick Williams, who had passed the required examination.

A report was read from the Council upon Dr. West's proposals to form Standing Committees of the College to deal with professional and public matters in which it was desirable that the College should take action. The Council advised the College not to assent to these proposals, the existing system of the appointment of Select Committees whenever occasion arise being quite adequate to the purpose. After a prolonged debate it was finally decided to adjourn the discussion to the next meeting.

A report was read from the Committee of Management of the Examining Board in England, advising: (1) The omission of Medical Botany from the curriculum; (2) an option to candidates of taking Materia Medica and Pharmacy either as part of the First or as part of the Second Examination, and the permission to candidates to avail themselves at once of these alterations. Considerable discussion arose upon this report, and the synopsis of Materia Medica and Pharmacy, but the report was finally accepted without alteration.

ROYAL COLLEGE OF SURGEONS.

AT an ordinary meeting of the Council of the College, held on the 11th inst. the minutes of the last meeting were confirmed. The death of Mr. Cooper Forster was announced to the Council, and a unanimous resolution of condolence with Mrs. Forster and her family was passed. A resolution was passed to inform William Turnbull of his removal from being a member of the College owing to his conviction for manslaughter, the usual notice to be sent to the Medical Council.

The report of the Committee on the mode of obtaining the Fellowship of the College was received, and the two methods proposed by them adopted.

"In one of these the Council would elect to the Fellowship, every year, a certain number, not exceeding ten, of Members of the College, of not less than twenty years' standing, who are distinguished by scientific or professional ability, or by good service rendered to the profession or the public, and who are recommended by ten Members of the College, of whom at least half shall be Fellows, none of the Fellows so recommending being members of the Council.

"In the other method, Members of not less than fifteen years' standing would be exempted from the First Professional Examination for the Fellowship—that, namely, in Anatomy and Physiology,—and would be required to pass only the Second Examination, as defined in the Regulations for the Fellowship."

The following was also adopted by the Council:—

"That the Council should acquire the power of electing two persons, who shall be considered and named Honorary Fellows of the College, and who, whether Members of the College or not, should be persons who have rendered distinguished service in the advancement of surgery or the sciences allied to surgery. The Honorary Fellows should be exempted from the payment of any fee, and should not have the right of voting for or becoming members of the Council."

The report from the Committee of Management of the two Colleges in reference to the alterations in the curriculum was read and adopted. (See report of the Royal College of Physicians, *supra*.)

The President reported the arrangements made for laying the foundation stone of the new Examination Hall on the 24th inst. The Colleges wish all branches of the profession to be represented; and after lots have been drawn for the seats at the disposal of the authorities, the tickets will be forwarded to the successful Fellows and Members; this will be the only notice of the result of the drawing. The guard of honour will be formed by the Volunteer Medical Ambulance Corps, with probably the Medical Company of the Artists' Volunteer Corps. A military band and the choir of the Savoy Chapel will be present. The Archbishop of Canterbury will open the proceedings, after which an address from the two Colleges will be delivered. Fuller details will be supplied in the programmes which will be distributed on the occasion.

The President of the College received the permission of the Council to give a conversazione in the museum during the coming summer.

Sir Joseph Lister was elected successor to the late Mr. Forster on the Committee of Management.

A letter was read from Dr. Collum, president of the Association of Members, forwarding a resolution of the Central Committee of the Association, expressive of the intention of the Association to resist the proposal to largely increase the number of Honorary Fellows.

The Council proceeded to the consideration of the motion brought forward by Mr. Macnamara on January 14th last, which had been postponed, and he moved his resolution in the following altered form:—

"That the Fellows be requested to state if in their opinion it is desirable to extend to Members of the Royal College of Surgeons the right to vote at the annual election of Fellows as members of the Council."

This was seconded by Mr. T. Smith, but lost by 16 to 4.

Mr. Marshall gave notice that he would propose a resolution at the next meeting of the Council, in reply to the resolution adopted by the Fellows and Members who were present at the meeting held on December 17th last.

MEDICAL NOTES IN PARLIAMENT.

Overhead Wires.

IN the House of Commons, on the 4th inst., in reply to Mr. M'Iver, Mr. J. Collings stated that the Local Government Board had no doubt that if a measure were brought in dealing with overhead wires, powers would be conferred on urban sanitary authorities to make bye-laws or regulations with respect to such wires for the protection of life and property.

Water-supply &c. Bill.

On the 5th inst., on the order for resuming the adjourned debate on the motion for the second reading of this Bill, Mr. Broadhurst stated that since the adjournment of the debate the hon. baronet (Sir J. McGarel Hogg) who was in charge of the Bill had agreed that he would in committee omit such portions of it as empowered the Board to take the initiative in legislation. The Bill would then only enable the Board to oppose measures which they might deem to be adverse to the interests of the metropolis. In these circumstances, Her Majesty's Government would not further oppose the second reading. The Bill was opposed by several members of the House, and after a lengthy debate was rejected by a majority of 54, the numbers being: for the second reading 76, against 130.

Lunatic Asylum Officers in Ireland.

On the 9th inst., in answer to Mr. Corbett, Mr. Morley stated that he believed as a matter of fact lunatic asylum officers are treated in respect of pension pretty much on the same footing as Her Majesty's judges, and far better than permanent Under-Secretaries of State. In Ireland these officers and servants are pensioned on the lines of the Civil Service Superannuation Act. In Scotland he understood they have no pension at all. He did not think it would be possible to induce Parliament to sanction again such terms as have been given in England. Looking to the analogy of the public service generally, it would be difficult to make a case that would satisfy the Treasury of the sufficiency of the claim that all appointments in lunatic asylums in Ireland should be treated exceptionally under the provisions of Clause 4 of the Superannuation Act. The Treasury contribution to public lunatic asylums both in England and Ireland is at the rate of 4*s*. per head per week.

Obituary.

JOHN COOPER FORSTER, M.B. LOND., F.R.C.S.

IT was with a feeling of melancholy surprise, mingled with sincere regret, that the profession received the unexpected announcement that Mr. Cooper Forster had passed away early on the morning of the 2nd inst. A man of magnificent physique, tall, well-grown, and handsome, with a vigour that many a junior might envy, he seemed marked out by nature for a successful career, to be followed by a long term of intellectual age. His professional work terminated only in July last, when he retired at the age of sixty-one from the highest position in his profession, that of President of the Royal College of Surgeons of England. From this time, being possessed of ample means, he determined to leave the field of surgery to his juniors and to spend the remainder of his days in the quiet enjoyment of his family circle. In January he left England with his wife and daughter for a tour on the Riviera. While at Nice he began to lose appetite, which he was inclined to attribute to the difference in diet, but as a feeling of weakness increased he determined to return to England. He travelled home without rest on the way, and arrived at Upper Grosvenor-street in a collapsed state on Wednesday evening, Feb. 24th. He was attended by his colleagues, Dr Habershon and Dr. Wilks, on whose advice his wife and family were communicated with by telegraph. They reached home on Saturday, and he died early on the following Tuesday

Mr. Cooper Forster was born in Lambeth, on Nov. 13th, 1823, and was the son of Mr. John Forster, who practised for many years in that neighbourhood. He was educated at King's College, and afterwards at Guy's Hospital, where he passed through a distinguished career as a student, being one of the first among consulting surgeons to avail himself of the University of London degree, in addition to the Fellowship of the Royal College of Surgeons. He graduated as Bachelor of Medicine in 1847, and was placed second in honours (with a gold medal) in Surgery, and also second in honours in Midwifery. In the following year he was placed eighth for a commission in the army, of which he did not take advantage. In 1856 he was appointed third assistant-surgeon to Guy's Hospital, two having sufficed for the duties up to that time. The following year he distinguished himself by performing the first gastrostomy in England upon a patient suffering from cancer of the œsophagus, under his colleague, Dr. Habershon. He continued to act as assistant surgeon until the retirement of Mr. Hilton in 1870, when he became surgeon to the hospital. In this position he found ample scope for his generous nature and surgical skill. His wards were always beautifully decorated with palms and ferns at his own expense, and his patients received almost paternal care and attention, whilst the sisters and nurses were devoted to his service. It was this which made him feel so acutely the proposals of Miss Burt when first appointed matron; one of which was that the nurses should be removed from ward to ward every

three months, and thus be detached from their sister and surgeon. Happily, owing to the protests of the staff, this rule was never carried out. Eventually all the new proposals were subjected to a joint committee of the governors and staff, and the retirement of Miss Burt and the appointment of an amiable successor brought this unfortunate dispute to a close. It is needless to revive the particulars of this bitter controversy, which a little tact and judgment on the part of the executive could so easily have prevented; but the circumstances immediately preceding Mr. Cooper Forster's retirement have never been published. It happened during the long vacation of 1881, when many of the staff were away on their holidays, that an important communication was received from the governors. To this an unfortunately worded reply was sent, and as so many of the staff were absent it was signed only by the senior physician and senior surgeon. The governors regarded this reply as a personal insult, imputing to them bad faith, and retorted by calling upon Dr. Habershon and Mr. Cooper Forster to resign. The staff, on reassembling in October, unanimously resolved to withdraw this note, at the same time (what is not generally known) they almost without exception placed their resignations in the hands of Dr. Habershon and Mr. Forster, to be used in case the governors failed to reinstate them, so that at this time the medical school of Guy's Hospital was on the very verge of being broken up. The governors, however, allowed the note to be withdrawn and reinstated their medical officers, who continued to attend the hospital and to lecture for six weeks longer. At the expiration of their clinical lectures, Dr. Habershon and Mr. Cooper Forster, finding their position intolerable, much to the regret of their colleagues, and without consultation with them, resolved to send in their resignations. In this way Mr. Forster's long connexion with his *alma mater* was abruptly severed. It was not, however, passed over without recognition by his former pupils and the profession generally, who subscribed a handsome testimonial for him and his colleague.

Mr. Forster was a man of strong opinions, vigorous in words and actions. He made firm friends, and, as must happen with men of character, an occasional enemy; but those with whom he differed recognised in him an honest, straightforward opponent. His friendship was of a kind which often extended to his friend's friends, and perhaps sometimes led him into opposition to his friend's enemies. If ever he showed weakness, the influence of someone whose friendship he desired to retain would always be found as the source of his hesitation; but indecision was never one of his characteristics. In his home he was the most hospitable and genial of hosts, affable, kindly, and generous. Fond of society, and possessing many tastes outside his profession, he was an amusing and entertaining companion; an affectionate husband and father, endeared to all alike; and his family was typical of the best features of an English home. In his student days he was much given to boating, and was a distinguished amateur oarsman, an exercise he continued to enjoy almost to the end. Of late years he often spent his leisure hours in fishing, another pastime to which he was warmly attached. He took great interest also in fern-culture, and possessed a very valuable and remarkable collection of filmy ferns, in the cultivation of which he was an acknowledged authority.

As a surgeon Mr. Forster was prompt and decided, and ever ready to test new methods, any good in which he would adopt with enthusiasm. In 1867, after a visit to Scotland, he returned fully impressed with the superiority of acupressure over the old silk suture for the arrest of arterial bleeding, and his opinions were published in the Guy's Hospital Reports for that year. In the next volume he has a paper on Torsion, and soon he had adopted this method to the exclusion of every other. When antiseptic surgery was in its infancy he was the first surgeon at Guy's Hospital to put it to the test, and though he did not afterwards follow the method in all its details, he fully recognised the greater safety which the Listerian system gave to operative surgery. Some years ago, when the temperance movement began to make way and some surgeons proclaimed that patients would recover more rapidly from operations if deprived of stimulants, he determined that at Guy's Hospital treatment without stimulants should have a fair trial, and for a time every patient operated on by him was allowed nothing stronger than milk. This he insisted on with his usual determination and exactitude, and it once led to a curious episode between him and a house-surgeon. One evening a patient was admitted with both legs crushed to the knees, and, as has always been the etiquette at Guy's Hospital, the surgeon, after having amputated one limb, allowed the house-surgeon to remove the other. After Mr. Forster had left, the patient was found to be pulseless, and the house-surgeon, sitting by his side, administered brandy at the rate of an ounce every hour until reaction took place. On the following day, when Mr. Forster arrived and discovered that a large quantity of stimulant had been given, his brow darkened, as he sternly inquired why the house-surgeon had acted contrary to his instructions, and it seemed likely that the junior would pass *un mauvais quart d'heure;* but when he had explained the circumstances, and pleaded that he only desired to give stimulants to the limb for which he himself was responsible, Mr. Forster frankly forgave him, and at once admitted that as one of the principals in the case, and on the spot, the house-surgeon had a perfect right to act on his own responsibility. This was very characteristic of him in his relation to juniors. A man who could defend his opinions was always regarded by Mr. Forster with respect, but one who was cringing and uncertain found with him but little favour. Nervous men, perhaps, did not always receive from him due consideration, as he was one of a school that regarded such as unsuited for the medical profession; but no student ever sought his advice or aid without finding in him an earnest and sincere friend.

Besides contributing numerous papers to the Guy's Hospital Reports and to the Societies, Mr. Forster was the author of a work on "Surgical Diseases of Children," founded largely on his experience at the Waterloo-road Hospital for Children and Women, to which he was attached for a long period. He lectured for many years on Anatomy in the medical school, and his lectures were always popular. Afterwards, on the death of Mr. Poland, he was appointed Lecturer on Surgery; but from this chair he retired on the resignation of Mr. Birkett.

Mr. Forster married, in 1850, Adela, the only daughter of Munden Hammond, Esq., of Kennington, by whom he had seven children, four of whom survive. His wife was an accomplished pianist, and many will remember the pleasant musical evenings at which Mr. and Mrs. Forster delighted to entertain their friends. His married life was of the happiest, but was once crossed by a terrible grief. In 1864 he lost two sons from diphtheria, and it was typical of his paternal solicitude and personal self-control that, when suffocation was imminent, he performed the operation of tracheotomy with his own hands.

Mr. Cooper Forster's commanding presence and handsome face will long be missed in the profession of which he was so distinguished an ornament, and a large circle of friends will mourn over the loss of a man of the highest integrity and moral worth.

JOHN CAWOOD WORDSWORTH, F.R.C.S.

IN the subject of our notice there has been lost to the profession a man who, in his quiet unassuming way, had done much for the advancement of its knowledge, and, firm in his honesty of purpose and freedom from the arts of those who "creep and climb into the fold," was to all who knew him intimately an admirable example of the genuine "dignity and reputation of the profession." With all the modesty of true merit, Mr. Wordsworth was unobtrusive almost to a fault; and overshadowed as his life had been for many years by a sense of physical weakness, and, of late especially, by a growing conviction that he also was to be removed prematurely by the like heart failure which had proved fatal to his two brothers, it happened, doubtless, that he was to some extent disqualified, both by his *morale* and by his *physique*, for attracting all the notice he deserved. Among those, however, with whom he was closely associated, his colleagues, contemporaries, and pupils in early days at the London Hospital, his colleagues in the East (when doing good service in Smyrna and in the Crimea), his colleagues and pupils at the Ophthalmic Hospital—among all these were well known the ability, accurate observation, sound judgment, practical skill, and, not least admirable of all in these our days, the honesty, the candour, and the loyalty to his professional brethren, which were his attributes. With his patients, and in private life, he was especially attractive by reason of his gentleness (how often mistaken nowadays for feebleness), his thoughtful con-

sideration for others, his sympathetic nature, his geniality, and withal his keen but quiet sense of humour—qualities which always invited, and never disappointed, the fullest and most implicit confidence.

John Cawood Wordsworth was born in 1823, at Manchester, where his father, the Rev. William Wordsworth (sprung from a collateral branch of the poet's family in Yorkshire), was then a curate. In 1840 he was apprenticed to a well-known general practitioner of Manchester, Mr. John Jesse; and to the end of his days he never ceased to acknowledge the benefits he derived from his association with that gentleman, and to advocate the advantage to anyone intended for the medical profession of a well-ordered apprenticeship, with its early initiation in the routine and the (so-called) "little expedients" of general practice. Proceeding in due course to enter at the London Hospital, he became an earnest and diligent student, and presently, and for two years, acted as house-surgeon. So unremitting was he in his devotion to his duties that, not long after completing his qualifications, his health began to suffer, and his constitution (to quote a good expression of his father), not being "town-tempered," threatened to break down. Acting upon the advice of Dr. Pereira and some other of the authorities of the time, he determined to go to Madeira; but accident took him to the West Indies, where he settled himself down in St. Kitt's in practice. At the end of two or three years, however, his health being apparently thoroughly restored, he returned to London, and in 1849 was elected demonstrator of anatomy and assistant-surgeon to his old hospital, and became a little later one of the assistant-surgeons to the Royal London Ophthalmic Hospital in Moorfields.

In 1855, obtaining leave of absence from the governors of his hospital, Mr. Wordsworth answered to Mr. Sydney Herbert's call for volunteers in aid of the over-taxed military medical staff in the East, and went as surgeon to the Civil Hospital in Smyrna. Situated too far from the scene of active operations, the Smyrna Hospital offered but little opportunity for surgical practice, and he, together with some of his colleagues, proceeded to the Crimea, where he arrived just in time to render good service "in the front" to those wounded in the attack upon the Redan. For three months during the following winter he was attached to the Castle Hospital on the heights above Balaclava, and there his sound surgical knowledge, ready resource, and untiring devotion to duty found ample opening for exercise and ready and grateful recognition. The Crimean medal with Sebastopol clasp, and the Turkish medal, were awarded to him for these services at the termination of the campaign. Returning to Smyrna in the spring of 1856 he married a daughter of M. Chasseaud of that place, and came back to his old house in Finsbury-square. In 1859, wishing to devote himself especially to ophthalmic surgery at the West-end, he resigned his appointment at the London Hospital, "in compliance with the" (then existing) "regulations of that charity," and removed first to Queen Anne-street, and a few years later to Harley-street. As full surgeon to the Ophthalmic Hospital, he continued to utilise the vast (wellnigh overwhelming) material afforded by that institution, until, "compulsorily retired" by inexorable Time, he became consulting surgeon in 1883, having endeared himself during his thirty-one years' service to all who came in contact with him by his many lovable qualities. He was a vice-president of the Medical Society and of the Ophthalmological Society.

The expression employed above, "his health being apparently thoroughly restored" during his stay in the West Indies, was used advisedly. The improvement probably was more apparent than real. Some permanent defect in his blood-making power had, not unlikely, resulted from the lung mischief which at that time threatened his destruction, and was slowly, but surely, impairing his nutrition. It was not less than fifteen years ago that marked symptoms of a feeble heart first showed themselves, and these being aggravated (perhaps caused) by the effect of repeated attacks, more or less insidious and occasionally severe, of rheumatic gout, soon left but little room for doubt that he was to be the victim of cardiac muscular degeneration. And it was in this way that the end came, with frequently recurring paroxysms of angina pectoris, all borne "without one fretful word," and at the last, happily, with a painless pericardial effusion.

Mr. Wordsworth died on Feb. 22nd leaving a widow and one son, who is also a surgeon.

JOHN ARCHER, F.R.C.S.

ON Monday evening, the 8th inst., Mr. John Archer died, after a slight attack of angina pectoris, of which he had several severe seizures during the preceding week. He was seventy-seven, and had practised in Birmingham, his native town, upwards of fifty years. He was a good type of the general practitioner of the old school—honourable, hard-working, and successful. He was for some years one of the surgeons to the Birmingham Lying-in Hospital, and a director of the local Medical Benevolent Society. He was also a past president of the Birmingham Medical Institute, of which he had been uniformly a liberal supporter. A staunch Conservative and churchman, hospitable, and a good man of business, Mr. Archer held a much respected position.

Medical News.

SOCIETY OF APOTHECARIES.—The following gentlemen passed the examination in the Science and Practice of Medicine, and received certificates to practise, on the 4th inst.:—

Andrews, Charles, M.R.C.S., Hammersmith-road.
Shaw, Arthur Crokat, Thorfolk-road.
Snow, Lionel Mason, King Henry's-road.
Soy, Edward, South Lambeth-road.
Vernon, Arthur Heygate, Macaulay-road, Clapham.

On the same day the following gentleman passed the Primary Examination:—

Priestley, Percy, Sheffield School of Medicine.

THE death is announced of Dr. E. Zillner, privat docent in forensic medicine in Vienna.

ON the 3rd inst. the wife of a horse breaker at Beverley gave birth to four girls, all of whom are living and doing well.

HERBERT PENNEL HAWKINS, B.A., of Pembroke College, has been elected to a Radcliffe Travelling Fellowship at the University of Oxford.

A DEPUTATION recently attended at the Local Government Board Offices to protest against the erection of a small-pox hospital at Darenth by the Metropolitan Asylums Board.

VACCINATION GRANT.—Mr. T. Palmer Stephens, of Emsworth, Hants, has received the Government grant for efficient vaccination in the Westbourne Union and the Havant Union respectively (sixth time).

AWARD FOR EXTRA MEDICAL SERVICES. — The guardians of the Havant Union have voted Mr. T. Palmer Stephens a cheque for £20 and their thanks for his extra services and attention to the poor during the epidemic of enteric fever at Emsworth, during the autumn of 1885.

AT a meeting of the City Commissioners of Sewers on the 9th inst., a committee was appointed for the purpose of considering the advisability of sinking wells for supplying the citizens of London with water. The experiment has, it was stated, been successfully carried out by more than one large City firm.

UNIVERSITY OF CAMBRIDGE.—The examinations for medical and surgical degrees will be held on the following days of the Easter term:—First examination for M.B. degree, June 5th; second examination, June 8th; third examination, part 1, May 11th, part 2, May 12th; Bachelor of Surgery, May 15th; Master of Surgery, May 14th.

WHILST Mr. Stowell, M.R.C.S., of Brighton, was driving down Marine-parade, Brighton, a day or two ago, his horse bolted and dashed through a large plate glass window of a shop in Castle-square. Mr. Stowell was so much injured that he had to be taken to the Sussex County Hospital, where he is expected to remain some days.

MEDICAL MAGISTRATES.—The Lord Chancellor has, on the recommendation of the Earl of Ducie, Lord Lieutenant, appointed Dr. Paine, F.R.C.P. Lond., of Stroud, to the Commission of the Peace for the county of Gloucester.—Dr. Frederick H. Daly of Amhurst-road, Hackney Downs, has been appointed a Justice of the Peace for the county of Middlesex, by the Lord Chancellor, on the recommendation of Lord Enfield, Lord-Lieutenant of the county.

PRESENTATION.—A beautifully illuminated address, framed in oak, with a pair of brass candlesticks and an inkstand, have been presented to Mr. Stenson Hooker, L.R.C.P. & L.R.C.S., on his leaving Midhurst, by the members of the Midhurst Literary Institute, of which he was the hon. secretary.

GLASGOW OPHTHALMIC INSTITUTION. — The seventeenth annual general meeting of the donors and subscribers to this institution was held on the 8th inst. The number of patients treated during the year was 3295, of whom 380 were received into the hospital. The income amounted to £1129, falling short of the expenditure by £120.

ASYLUM FOR CHILDREN WITH CHRONIC DISEASES.—Prince N. Usupoff has given 5000 roubles (£500) towards building an asylum for poor children in St. Petersburg who have been discharged from the hospital for children with chronic diseases. The example of the Russian prince might well be followed by many wealthy persons in this country.

ROYAL LONDON OPHTHALMIC HOSPITAL.—The annual general meeting of the governors of this hospital was held on the 9th inst. During the past year 2118 patients have been admitted to the wards, or 90 more than in 1884, and the number of out-patients was 25,863. The annual subscriptions amounted to £757, and the donations, including legacies, to £4473. The excess of expenditure over income was £303.

SMALL-POX HOSPITAL FOR BRADFORD.—At a meeting of the Bradford Town Council on the 9th inst., it was resolved to contribute the sum of £2000 towards the cost of providing a small-pox hospital in the event of the same being built by the commttee of management of the Bradford Fever Hospital on their land, according to plans to be approved by the corporation, and on condition that such small-pox hospital shall be used exclusively for the accommodation of persons residing in the borough.

ABERDEEN HOSPITAL FOR SICK CHILDREN.—The annual meeting of subscribers to this institution was held on the 3rd inst., when it was reported that the new buildings, affording accommodation for about sixty children as in-patients in the general wards, and eighteen in the infectious wards, were completed. The total number of patients who received benefit during the past twelve months was 1054. The total cost of the extension is estimated at £7154, to make up which a sum of £2275 is still needed. The income amounted to £711, and the expenditure to £717.

BRITISH LYING-IN HOSPITAL.—On the 5th inst., at the annual meeting of the governors of this charity, it was reported that out at a total of 822 cases treated during the past year, there had only been one death. The governors have sanctioned a system of admitting a few paying patients in order to utilise a portion of the hospital premises, but this will in no way encroach upon the funds of the institution or interfere with its benevolent work. The number of annual subscribers has lately suffered a diminution, and the committee appeal for further public support.

WESTMINSTER OHPTHALMIC HOSPITAL.—The annual meeting in connexion with this charity was held on the 5th inst., when a highly satisfactory report was presented by the committee. Since its foundation in 1816 to the 1st of January, 1886, 347,878 persons have availed themselves of the benefits conferred by the hospital. Of this number 12,097 have been admitted as in-patients, and operations have been performed in 25,308 cases. There is accommodation for fifty in-patients, but only fourteen free beds can now be occupied, owing to want of funds.

THE SANITATION OF CALCUTTA.—A most important memorial to the Lieutenant-Governor of Bengal on this subject is now in circulation. It has been signed by all classes of the population and by the entire body of local physicians, and states that since the year 1881 cholera has swept away more than 20,000 people in Calcutta and its suburbs, that in some suburban wards the death-rate has stood at 70 in the 1000, and that during the decade of 1875 to 1884 out of a population of 257,000 in the suburbs no fewer than half have perished. The memorial points out that this mortality is clearly traceable to defective sanitation. It expresses hearty concurrence with the Government policy of strenuous sanitary reform, and suggests certain legislative and other changes which the emergency renders necessary.

BY invitation of the Council a large party assembled on the 25th ult. to inspect the new wards which have recently been erected in connexion with the Royal Hospital for Diseases of the Chest, City-road, at a cost of about £12,000.

NORTH LONDON HOSPITAL FOR CONSUMPTION.—The annual report which was read at the meeting of the governors of this institution on the 10th inst., stated that, notwithstanding the commercial depression, there had been a steady improvement in the revenue of the hospital, and the number of annual subscribers had increased. The total receipts for 1885 had been £4837 11*s.* 2*d.*, against £3029 2*s.* 6*d.* for the previous year. The total liabilities had been reduced from £3610 19*s.* to £2406 4*s.* 3*d.*; but there was still a mortgage of £5000 on the hospital at Hampstead.

DEATHS AT VERY ADVANCED AGES.—Two deaths at very advanced ages are reported in the Russian journals. One is that of a Jew named Sribny, aged 117, in Pereyaslaff, in the province of Poltava, who seems to have retained all his faculties to the last, his eldest son, who is 82 years of age, being less active than his father was just before his death. The second case, which is more exceptional still, is that of a woman named Annah Kubova, who lately died in the province of Baku at the age of 130, and who, with the exception of failure of eyesight, retained her health and intellect to the end. Our authorities for these cases are respectively the *Kiefflyanin* and the *Kaspii*.

ROYAL SURREY COUNTY HOSPITAL.—On the 27th ult. it was reported at the annual meeting of the governors of this institution that 572 in-patients, 166 home patients, and 3279 out-patients had been treated during the past year. It is hoped that the new wing, intended for the reception of thirty additional patients, will be completed and ready for occupation by next winter. The total income amounted to £3769. After the report of the committee had been read and adopted, a lengthy discussion took place on the question of home visitation and the house-surgeon's duties. Many of those present joined in the debate, but no resolution was adopted, and the subject was allowed to drop.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BROWN, WILLIAM J., B.A., M.B., L.R.C.S.I., has been appointed Certifying Surgeon of Factories for the Chester-le-Street District.

CLEAVER, Mr. EDWARD L., has been appointed Public Analyst by the Fulham Vestry.

COLLINGRIDGE, WILLIAM, M.A., M.D., M.R.C.S., has been appointed by the Port Sanitary Committee Public Analyst to the Port of London.

EGAN, FRANCIS, L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer of Health by the Fulham Vestry.

HANDFIELD-JONES, MONTAGU, M.B., M.R.C.P., has been elected by the Governors Physician to the British Lying-in Hospital.

HOPE, E. W., M.D.Ed., B.Sc., L.R.C.P.Lond., Assistant Medical Officer of Health for the City and Port, has been appointed to the Lectureship on Public Health at University College, Liverpool.

HYDE, JOHN K., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Earl's Barton District of the Wellingborough Union.

LEFTWICH, C. HARCOURT, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the West Deptford District of the Greenwich Union.

MALET, HENRY, M.D., M.A. Dub. Univ., has been appointed Honorary Physician to the Wolverhampton and Staffordshire General Hospital.

MOLONY, M. J., L.R.C.P., L.R.C.S., has been appointed Surgeon to the Parnell Quarries, Arklow.

POWELL, H. A., M.A.Oxon., M.R.C.S., &c., has been appointed Honorary Medical Officer to the All Saints' Home for Women and Children, Beckenham.

RIGG, JOHN, M.B., C.M.Ed., has been appointed Medical Officer for the Seventh District of the Preston Union.

ROBERTS, H. W., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the South Deptford District of the Greenwich Union.

SHAW, HARRY CHARLES COSTELLO, L.R.C.P.Lond., M.R.C.S., has been appointed Medical Officer of Health for the Mildenhall Rural District; and Public Vaccinator for the Lakenheath District of the Mildenhall Union, Suffolk, vice W. T. Angove, M.R.C.S., L.S.A.Lond., resigned.

SHORLAND, WALTER E., M.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer for the Third District of the Barton Regis Union.

WALKER, J. R., M.R.C.S., late Resident Obstetric Assistant to University College Hospital, has been appointed House-Surgeon to that Institution.

WILLIAMS, MUZIO, R., M.R.C.S., L.R.C.P., L.S.A.Lond., has been appointed Assistant Resident Medical Officer to the London Fever Hospital, vice O. Fowler, M.D., resigned.

Births, Marriages, and Deaths.

BIRTHS.

BLAKE.—On the 1st inst., at Blackfriars-road, London, the wife of Walter B. Blake, L.K.Q.C.P.I., L.R.C.S.I., of a daughter.

COATS.—On the 6th inst., at The Mount, Fleetwood, Lancashire, the wife of Surgeon-Major J. Coats, Army Medical Staff, of a daughter.

GARDNER.—On the 9th ult., at Bareilly, N.W.P., India, the wife of E. B. Gardner, M.R.C.S., L.R.C.P.Ed., Civil Surgeon, of a daughter.

HAYLE.—On the 7th inst., the wife of T. H. Hayle, M.B., of Rochdale, of a daughter.

NEALE.—On the 28th ult., at London-road, Leicester, the wife of J. Headley Neale, M.B., &c., of a daughter.

PLAYFAIR.—On the 1st inst., at Rutland-street, Edinburgh, the wife of John Playfair, M.B., F.R.C.P.E., of a daughter.

ROBERTS.—On the 2nd inst., at Dragonfield, Uxbridge, the wife of Charles Roberts, M.R.C.S., of a daughter.

ROBERTSON.—On the 4th inst., at Gonville House, Rochampton-park, S.W., the wife of A. Milne Robertson, M.D., of a daughter.

WARD.—On the 6th inst., at Casita, Northumberland-park, Tottenham, the wife of A. Ogier Ward, M.B., of a son.

MARRIAGES.

BLAMPIED—DE GARIS.—On the 3rd inst., at the Town Church, Jersey, John William Blampied, M.R.C.S., L.S.A.Lond., L.M., of West Grove, St. Lawrence, to Alice Mélanie, eldest daughter of Colonel De Garis, Commanding late 4th Royal Guernsey, of St. Saviour's, Guernsey.

EAST—GARMAN.—At St. Stephen's, North Bow, E., by the Rev. T. R. Lawrence, Vicar, Arthur James East, second son of Joseph East, Esq., of The Limes, East Ham, Essex, to Martha, second daughter of Dr. H. V. Garman, of Kent House, Bow-road.

GOULD—WOODRUFF.—On the 3rd inst., at the Parish Church, Leamington, Ernest Edward Gould, M.R.C.S., of Hailsham, Sussex, youngest son of John B. Gould, of Exeter, to Charlotte, eldest daughter of the late John Farrer Woodruff, of Leamington.

MACLEHOSE—MACMILLAN.—On the 6th inst., at Holy Trinity Church, Upper Tooting, Norman Macmillan MacLehose, M.B., of Sevenoaks, youngest son of the late James MacLehose, of Glasgow, to Olive, second daughter of Alexander Macmillan, of Knapdale, Upper Tooting.

PIGEON—GRINDLEY.—On the 9th inst., at St. Anne's, Highgate-rise, N., by the Rev. C. T. Ackland, M.A., assisted by the Rev. C. C. Buss, M.A., Henry Walter Pigeon, M.A., M.B., B.C., F.R.C.S., of Albion-street, Hull, son of Colonel Pigeon, of Bristol, to Nellizzie, second daughter of the late R. Dutton Grindley, Esq., of Highgate, N.

RANKIN—BEEDLE.—On the 23rd ult., L. K. Rankin, M.A., F.R.C.S., to E. Beedle.

SOUTAR—CLARK.—On the 3rd inst., at Barnwood, near Gloucester, James Greig Soutar, M.B., of Barnwood House, to Mary, daughter of the late Rev. J. P. Clark, M.A., Minor Canon and Precentor of Gloucester Cathedral.

THOMSON—WILLIS.—On the 3rd inst., at All Saints', Blackheath, George Lawson Thomson, M.D., of Wootton-hill Lodge, Newbury, to Emily, youngest daughter of the late Thomas Willis, M.D., M.A.Cantab.

WOOLFRYES—MACEWEN.—On the 9th inst., at St. Stephen's, Bayswater, Surgeon-General J. A. Woolfryes, M.D., C.B., C.M.G., to Ada Sophia, youngest daughter of Alexander Palmer MacEwen, of Woodend, Southsea, Hants.

DEATHS.

ARCHER.—On the 8th inst. (after a few days' illness), John Archer, F.R.C.S., of Carpenter-road, Edgbaston, aged 77.

BATTEN.—On the 27th ult., at Ty Gwyn, Brewood, Staffordshire, John Batten, L.R.C.P.Ed., L.F.P.S.Glas., eldest son of A. Batten, Esq., late of Aberdeen, aged 37.

BISHOP.—On the 6th inst., at the Hôtel des Anglais, Cannes, John Bishop, M.D., F.R.C.S.E., Assistant Surgeon to the Royal Infirmary, Edinburgh, aged 44.

BROWN.—On the 5th inst., at Milton Grange, Stourport, George Gwynn Brown, M.R.C.S., in his 76th year.

DOUGLAS.—On the 7th inst., at Woodside, Kelso (after a short illness), Surgeon-Major Francis Douglas, M.D., late of H.M. Bengal Army, in his 71st year.

GUTHRIE.—On the 3rd inst., at Fort Pitt House, Rochester, Alexander Guthrie, Deputy-Surgeon-General, Medical Staff, aged 53.

O'CONNOR.—On the 3rd inst., at his residence, King's-terrace, Southsea, Jacob Robertson Headlam O'Connor, M.D., aged 44.

OXLEY.—On the 6th inst., at Wellington Villa, Portswood Lawn, Southampton, Thomas Oxley, M.D., M.R.C.P., formerly Chief of the Bengal Medical Staff, aged 80.

READ.—On the 8th inst., at The Close, Salisbury, Raphael Woolman Read, F.R.C.S.Eng., Deputy Inspector-General of Hospitals, aged 67.

STORRAR.—On the 10th inst., at the residence of his brother, Stratheden House, Blackheath, John Storrar, M.D., late Chairman of Convocation of the University of London, in his 75th year.

WATSON.—On the 4th inst., at Burnopefield House, co. Durham, Henry William Watson, F.R.C.S., aged 65.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

Medical Diary for the ensuing Week.

Monday, March 15.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2 P.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Frederick Treves: On the Anatomy of the Intestinal Canal and Peritoneum in the Mammalia.
SOCIETY OF ARTS.—8 P.M. Mr. Boverton Redwood: Petroleum and its Products (Cantor Lecture).
MEDICAL SOCIETY OF LONDON.—8.30 P.M. Clinical Evening. The following cases will be shown. Mr. Edmund Owen: Boy with Reproduction of Upper End of Femur after Furneaux Jordan's Amputation.—Mr. Startin: (1) Case of General Xanthelioma; (2) Diffuse Scleroderma; (3) Angioma. Dr. C. T. Williams: A case of Mediastinal Tumour. Other cases and specimens.

Tuesday, March 16.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. Arthur Gamgee: The Function of Circulation.
PATHOLOGICAL SOCIETY OF LONDON.—8.30 P.M. Drs. Goodhart and Hale White: Trabeculated Skull in an Infant.—Dr. Percy Kidd: Diffused Symmetrical Cirrhosis of Lungs.—Dr. Hadden: (1) Tumour of Stomach; (2) Single Cyst of Liver (card).—Sir W. Mac Cormac: Tumour of Palate.—Mr. R. Williams: Acute Nephritis in Lambs.—Dr. Handford (Nottingham): (1) Unusual case of Ante-mortem Digestion of Stomach; (2) Right-sided Ulcerative Endocarditis (card); (3) Acute Intestinal Obstruction due to a Band (card); (4) Thrombosis of Left Posterior Cerebral Artery (card); (5) (for Mr. E. Powell) Congenital (?) Atrophy of Right Kidney (card).—Mr. F. T. Paul (Liverpool): (1) Congenital Adeno-sarcoma of Kidney; (2) Calcification of Arteries.—Dr. G. N. Pitt: Hydatid of Liver Embedded in a Syphilitic Deposit.—Dr. Sainsbury: Pyonephrosis from Vaivular Obstruction of Ureter.—Dr. Pasteur: Aortic Aneurysm with Mitral Stenosis (card); Mr. Fenwick: Post-trigonal Pouch containing Stone (card).—Mr. Shattock: Lumbo-sacral Meningo-myocele cured by Morton's treatment (card).—Mr. Ballance: Fracture of Thyroid Cartilage (card).

Wednesday, March 17.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Tuesdays and Fridays, 9.30 A.M.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 2 P.M.; and Saturday, 1 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Frederick Treves: On the Anatomy of the Intestinal Canal and Peritoneum in the Mammalia.
SOCIETY OF ARTS.—8 P.M. Mr. Vincent Robinson: Eastern Carpets.

Thursday, March 18.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. W. Boyd Dawkins: The Ancient Geography of Britain.
ROYAL COLLEGE OF PHYSICIANS OF LONDON.—5 P.M. Mr. S. J. Sharkey: On Spasm in Chronic Nerve Disease (Gulstonian Lecture).
PARKES MUSEUM OF HYGIENE.—8 P.M. Captain M. P. Wolff: The Rational Alimentation of the Labouring Classes.
HARVEIAN SOCIETY OF LONDON.—8.30 P.M. Mr. G. R. Turner: A case of Compound Fracture of the Patella.—Mr. Edmund Owen: Sprained Joints.

Friday, March 19.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Frederick Treves: On the Anatomy of the Intestinal Canal and Peritoneum in the Mammalia.
SOCIETY OF MEDICAL OFFICERS OF HEALTH.—7.30 P.M. Dr. Louis Parkes: The Sanitary Condition of Poor Districts in the Metropolis, with especial reference to their Waterclosets Accommodation.
SOCIETY OF ARTS.—8 P.M. Mr. William Simpson: Experiences on the Afghan Frontier.
ROYAL INSTITUTION OF GREAT BRITAIN.—9 P.M. Mr. W. H. M. Christie: Universal Time.

Saturday, March 20.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Mr. Edward B. Poulton: The Nature and Protective Use of Colour in Caterpillars.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Stewardʼs Instruments.)

THE LANCET Office, March 11th, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Mar. 5	29·36	E.	35	33	...	41	29	...	Overcast
,, 6	29·66	N.W.	34	33	...	42	31	...	Hazy
,, 7	30·25	N.W.	32	Froz.	...	37	27	...	Overcast
,, 8	30·32	E.	33	...	...	41	29	...	Cloudy
,, 9	30·44	S.E.	32	...	...	44	26	...	Fine
,, 10	30·40	E.	34	33	...	39	31	...	Overcast
,, 11	30·35	E.	31	...	...	41	27	...	Hazy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

HYDROPHOBIA, ITS PREVENTION AND TREATMENT.

Dr. Illingworth (Clayton-le-Moors) writes to suggest that the biniodide of mercury should be used in the treatment of hydrophobia, and also as a prophylactic in cases of dog-bite, in view of its well-known and powerful action in destroying the germs of syphilitic poison in the blood. Of course, local measures should not be neglected.

Twenty Years' Subscriber.—Certainly not. The prescription is the property of the patient.

Inquirer (Leeds) should consult his ordinary medical attendant.

"SCARLET HOSIERY."

To the Editor of THE LANCET.

SIR,—Permit me to ask through the means of your valuable journal in what way Mr. Woodland's friend suffered from wearing scarlet socks and stockings. Did he suffer from that troublesome and obstinate form of eczema known as arsenical eczema, or from induction by local contact, occurring on the dorsum of the foot, and more particularly on the anterior and lateral aspects of the leg?—or did he suffer from some of the forms of skin disease produced when arsenic is absorbed into the system, with the production of a variety of furunculi or yellow pigmentation of the body or other concomitant symptoms and signs connected with the lower part of the alimentary tract, which are some of the expressions of chronic arsenical poisoning? So far as my experience extends, wearing scarlet hosiery next the skin produces an obstinate form of eczema to treat and not the other conditions mentioned herein, unless the poison has been imbibed per orem for a lengthened period. But it would be interesting to know if any of the above-mentioned conditions or something new has supervened, provided there be exclusion of the use of arsenic as a remedial agent. I have seen, from wearing merino pants of a reddish tint, eczema of the thighs in patients who are addicted to sweat more than the ordinary. The eczema here, as in that from socks, &c., was of an obstinate nature to cure. I have also qualitatively tested bits from pants which produced eczema and found them to contain arsenic.

I am, Sir, yours truly,

March 2nd, 1886. W. A. HOLMES, M.B., &c.

"SYMPATHETIC IRRITATION OF THE PNEUMOGASTRIC."

To the Editor of THE LANCET.

SIR,—Allow me, in answer to Dr. Towers-Smith's request for information upon this subject, to state that I have found great benefit to be derived in these cases from the administration of valerianate of soda in three-grain doses. Valerian, besides being a direct tonic stimulant to the nervous system, undoubtedly has a powerful anæsthetic effect upon the nerve terminals of the vagus in the stomach.

I am, Sir, yours faithfully,

GEORGE HERSCHELL, M.D. Lond.

Moorgate-street, E.C., March 2nd, 1886.

MEDICAL EVIDENCE IN COURTS OF LAW.

Walter Weir, M.B.—We have many times replied to the question our correspondent submits to us. A medical witness is not bound to give evidence as to his opinions; but the difficulty—and it is almost an insuperable one—of determining what constitutes opinion and what mere fact always arises. What is commonly regarded as a "simple fact"—a circumstance grasped and understood at once by the ordinary observer—is in reality an inference, and to draw an inference practically means expressing an opinion. Moreover, if a witness has been examined in a public court, and has stated the result of his observations and the conclusions he drew from them, he can be made to repeat the substance of his depositions when the case is brought before a jury or is otherwise tried; for he has merely to be asked if he spoke the truth on the occasion when he was before the magistrate to give all that is required of him. In civil cases there is no fear of his being deprived of the just reward of his services; for if his clients refuse to pay the fee beforehand, he has only to say that his evidence may or may not be to their advantage. This is a sufficient inducement to secure payment of the "shekels." After all, there are but few instances in which solicitors are mean enough to commit a breach of faith. If our correspondent cannot afford to attend a court for the remuneration specified, he should avoid being a witness of fact, and then he cannot be a witness of opinion.

H. Campbell is referred to the last balance-sheet of the company, to a copy of which every policy-holder is entitled.

Sig. L. Corazza (Verona).—We have unfortunately no recollection of the article mentioned.

SPECIALISTS.

To the Editor of THE LANCET.

SIR,—Your opinion, or that of the profession, upon the following matter will greatly oblige.

I have acted as medical adviser to a family for about two years. Lately I have been treating one of their children. Some time ago, without my knowledge, the parents took this child to Dr. A. He said that he did not treat children, and advised them to go to Dr. B. They went, and when there—the mother of the child tells me—asked Dr. B. if he would meet me in consultation. He said it would be better to continue to bring the child to him. I understand the child was taken several times to his office. Some time ago this same child became ill. The parents requested Dr. B. to call. This he did, and continued to call. Some days ago the child had an attack of convulsions. I was sent for, when the mother made the above statement. At this visit she also told me that Dr. B. had spoken to her concerning the valuable experience he had, owing to the fact that he was connected with a children's hospital. He also added that he not only saw the children during life, but also after death, and that sometimes he had detected "little lumps" on their brain (the parents thought the child had some brain disease).

Now, Sir, I wish to know if Dr. B. acted a professional part in refusing to meet me in consultation when requested to do so; also, was it not his duty—even supposing the parents wished his opinion—to refer them back to me, and for me to arrange for a consultation. I may add that I care not a penny piece for any patient, but my experience has taught me that there is a certain class of doctors who dub themselves "specialist" or "consultant." In this way they induce one's patients to their office, dilate to them on the advantages of hospital experience and specialism, and the next event is—they have added that patient and the family to their general practice.

May I, at the same time, ask you if a doctor has any right to call himself a "consultant"? Mr. Justice Hawkins some time ago ruled that a consultation can take place only between two or more members of the medical profession. He made this remark when a doctor in court said of himself, "I am a consultant." I am, Sir, yours obediently,

March, 1886. M.D.

*** As represented above, the consultant's conduct is quite indefensible. We agree that a consultant is one who consults with his professional brethren.—ED. L.

KISSING THE BOOK.

To the Editor of THE LANCET.

SIR,—I took an opportunity which was offered to me last Thursday, in Mr. Justice Butt's divorce court, to raise a protest against the present manner of administering the oath to witnesses. Two notorious prostitutes had kissed the New Testament a short time previously, and I held that there was in consequence a risk of contagion. Apparently my protest amused the learned judge and many of the barristers, while others expressed their approval of the course which I had taken. Mr. Justice Butt met (as he thought) my objection by asking me to kiss the opened book, and the example may be followed by the diseased and healthy alike. But this does not meet the natural objection of a medical man to *handle* an unclean article. In a divorce court prostitutes will ever be called upon to give evidence, and will probably appear at every sitting; and, for aught I know, the cherished heirlooms which are called New Testaments may have been kissed and handled by generations of diseased individuals. I mentioned the fact in court that an article upon the subject had appeared in THE LANCET.

I am, Sir, yours faithfully,

Derby, March 6th, 1886. THOMAS HARKNESS.

EYE DISEASES AMONGST RUSSIAN SOLDIERS.

AMONGST the various communications made to the recent Russian Medical Congress on the subject of the prevalence of eye diseases in Russia was one by Dr. Tikhomaroff on the character of the regimental ophthalmic cases in the St. Petersburg district. These cases numbered in 1884 11·63 per cent. of the strength. The most frequent were conjunctival affections. Trachoma, too, was common. In one district hemeralopia occurred very often, the cause not being as yet clearly understood.

Inquirer.—General antisyphilitic treatment with cod-liver oil, and a lotion composed of tinct. cantharidis (ʒ ii.), with spirits of wine (ʒ ii.), lin. saponis (ʒ vi.), and ol. rosmarini (ɱ v.). If alopecia supervene in the secondary stage, it is generally amenable to treatment, but very difficult to cure later on.

LEAD-POISONING FROM MINCING MACHINES.

To the Editor of THE LANCET.

SIR,—Twenty years or so spent for the most part in examining the teeth and gums of all sorts and conditions of men ought, one would think, to render a man perfectly familiar with any appearance that these parts of the human frame can possibly present under any conceivable conditions of health or disease. Yet, strange to say, the phenomena I am about to describe, though in my experience far from uncommon, seem almost entirely to have escaped notice, or, if they have been recognised, to have been attributed to other causes than the true one. In examining the mouths of persons applying to me for professional advice, I have often been surprised by the presence of the blue line on the gums so well known as characteristic of lead-poisoning, and with it the less definite, but to the eye of an expert scarcely less striking, unhealthy appearance of the tongue and palate. I say I have been surprised, for my patients were not of the class one meets in hospital and dispensary practice, men working in lead and not paying too much attention to their personal habits; on the contrary, it was among those patients who were the most intelligent, careful, and well-to-do, those who best appreciated the importance of a thorough comminution of the food as a consideration of its proper exposure to the action of the saliva—it was among such that I most often met the "blue lead line." It was not industrial poisoning, that was certain, and I was eventually led to conclude that it must be from some habit or practice to which all my patients alike had been led by some motive common to themselves but not to others—i.e., to their families. This one condition, then, could be no other than the absence of teeth and inability to masticate, and the consequent practice of employing some mechanical substitute for mastication in preference to bolting their food, as less careful individuals of the variety *homo edentulus* do. In fact, in every case of a blue line on the gums of persons who had lost the majority of their teeth I found on inquiry that the individual constantly employed a mincing machine, and that his meat was cut up by it for him, whereas the other members of the family used it only on the comparatively rare occasions when all partook of mincemeat or sausage. I next proceeded to examine a number of the machines in question at the houses of friends, in the shops, and at one of the exhibitions at the Agricultural Hall, and found that in all the mill was formed by a number of small wheel-like segments strung on a rectangular axis, and each bearing three rudely-cut, oblique teeth, working between a series of fixed plates or blades. The latter were of steel; but the former, I found to my surprise, were of pure lead, so soft as to be easily cut with a knife or scratched with the thumb-nail, and leaving a black line when drawn along a sheet of paper; should they be pressed against one of the fixed blades, a thin film or shaving of lead would be worked off, and since meat when raw has always a slightly acid reaction from the presence of lactic acid, a certain amount of the lead must be liable to solution in the juice. Fats, too, though not containing any free acid, act in the same way on lead. Many obscure forms of dyspepsia may be traced to chronic lead-poisoning too mild to exhibit the commonly recognised symptoms. At any rate, the use of lead in contact with moist and acidulous articles of food in a machine involving a considerable amount of friction cannot but be a source of danger to health, though it is only in the case of persons who use such machines daily that unmistakable symptoms are produced; and I think that some substitute of a harmless metal or a hard wood ought to be insisted on.

I am, Sir, yours faithfully,

February, 1886. CHODWICK BROWN.

THE CASE OF H. P. FREUND.

To the Editor of THE LANCET.

SIR,—Seeing Dr. Mears' letter in your issue of the 27th ult. (p. 430) concerning Herbert Percy Freund, I should be glad if you would kindly give me space to say a few words upon the subject. I feel sure that there are many good, kind hearted men at St. Thomas's Hospital who would be willing to subscribe to a fund for so sad a case, if someone would volunteer to open one. I, for one, would be pleased to give my small contribution. I cannot refrain from asking why the London University men (especially as they consider themselves A 1 in every respect) have not taken up the case long ago, and not left it to our northern university to broach the subject. Is it that Durham men have more sympathy? Be that as it may, I am very glad that Dr. Mears has proposed a relief fund.—I am, Sir, yours truly,

A. J. HELM MONTAGUE, M.R.C.S., &c.,

March, 1886. Durham University and St. Thomas's Hospital.

EASY-THREADING SEWING-MACHINE NEEDLES.

MR. R. BARLOW, M.R.C.S., with the object of saving trouble and avoiding injurious straining of the eyesight, has introduced a sewing-machine needle which, by the provision of a diagonal gap cut in the eye, may be easily threaded by any part in the length of the cotton. The value and convenience of the device will no doubt be appreciated by those accustomed to use sewing machines.

Isaac Williams may consult the following works on the Stomach:—Hare, 1821; Brinton, 1859 and 1864; Abercrombie, 1828-1837; Prout, 1840; G. Budd, 1855; Habershon, 1857; Lees, 1857; Billard, 1825; Broussais, 1823; Beaumont, 1838; Fenwick, 1880; and Dujardin-Beaumetz.

Mr. W. A. Whittle.—1. The New York *Medical Record.*—2. Messrs. Sampson Low and Co., Fleet-street, London, E.C.

THE USE OF COCAINE IN OPERATIONS FOR PILES.

To the Editor of THE LANCET.

SIR,—The value of cocaine as a local anæsthetic has certainly not been over-estimated. I am not aware that it has yet been used by anyone but myself in the operation for piles; but a perfectly painless and, I believe, very safe operation may be performed by its use. Some three or four weeks ago I was requested to operate upon a gentleman (a chemist), who suggested its use in preference to chloroform. The operation was performed in the following manner. The pile being first bathed with warm water, the dry hydrochlorate of cocaine was dusted over it, which immediately became dissolved in the moisture, and in about ten minutes a grain of the hydrochlorate dissolved in eight minims of distilled water was injected into the base of the pile with the hypodermic syringe, the introduction of which was not felt by the patient. In another ten minutes the pile was enclosed in a very powerful clamp (invented, I believe, by Dr. Downes), which, when screwed down tightly, crushed the base so completely that when the pile was cut away the use of the cautery was hardly necessary. The operation was performed in the evening, and the patient would not consent to remain in bed the next day, but went about his business as usual. He declares that he felt no pain whatever at the time of the operation, and no appreciable pain or inconvenience afterwards. Since then I have performed the same operation, and with equally satisfactory results.

I think the first contribution to THE LANCET on the hypodermic use of cocaine was a letter of mine in your issue of Dec. 27th, 1884, on its use in circumcision. Since then I have used it six times for the same operation, and found it in every case most satisfactory. In one curious instance, nearly twelve months ago, I removed a large Hunterian chancre bodily away with the foreskin, and was naturally curious to see how the parts would heal. The operation was, however, in every way as successful as the rest. I also felt some anxiety about the development of the secondary symptoms, which, however, made their appearance quite in the ordinary way, but disappeared again with remarkable rapidity under ordinary treatment; and although the patient neglects medicine and leads a very irregular life, he does not appear to have suffered from any syphilitic symptoms for some months past. In circumcision I now dust the cocaine on the under surface of the foreskin first, and, the hypodermic syringe being introduced through this surface, even the pain usually caused by its introduction is avoided. I have also used cocaine in many other minor operations, such as amputation of fingers (through a joint); but, of course, in such cases it is impossible to prevent the pain caused by the hypodermic syringe.

I am, Sir, yours faithfully,

Southwick-street, W., Feb. 23rd, 1886. OWEN PRITCHARD, M.D.

PLACENTA PRÆVIA WITH TWINS.

To the Editor of THE LANCET.

SIR,—Mr. Chas. J. S. Digges relates in your issue of Feb. 20th, p. 383, a case of placenta prævia with twins, and regards it as unique. I think I have previously referred to a case of mine that happened about twenty years ago, the circumstances of which I still well remember. Having been from home for some hours, and returning about midnight, I learned that my assistant was engaged with three distinct cases, one being placenta prævia, and finding a note requesting me to come at once, I hastened to his assistance. The woman was very blanched, the flooding being very great. I found the case to be one of complete placental presentation. The os being soft and sufficiently dilated, I lost no time in delivering one child, and on further examination I discovered that there was a second, which was also speedily delivered, accompanied by a severe loss. The uterus, however, quickly contracted, and with a good pad and well-adjusted bandage after the placenta had been removed, all further loss seemed to be at an end, and warmth appeared gradually to return to the surface. I then left the patient in charge of my assistant, as I had to go to one of the other cases, but giving strict directions that he should remain with her until my return. He, thinking her apparently out of danger, left in about an hour. On my return, at about 6 A.M., I found that she had sustained a further slight loss just before my arrival, and had succumbed. Both children were alive, but whether they survived long I do not now remember. This being the only case of placenta prævia I had ever directly lost, it made a strong impression on my mind of the necessity when the exhaustion is great of remaining for some time after delivery.

I am, Sir, yours truly,

Feb. 27th, 1886. GEO. MUNDIE, M.D.

COLOUR-BLINDNESS AMONG MEDICAL MEN.

To the Editor of THE LANCET.

SIR,—I should like to ask through your journal whether colour-blindness is likely to be a bar to success in practice in the medical profession. The defect might not be without importance in the diagnosis of such conditions as iritis, the exanthemata, or in medico-legal inquiries where the practitioner happened to be called upon to give evidence as to colour of hair, eyes, &c., or of clothing worn by an individual. Are candidates for the naval and military medical services examined as to perfect vision for colours? This topic is suggested to me through my having recently discovered that a medical student whom I was teaching in elementary chemistry was unable to distinguish solutions of cobalt and nickel. This led me to experiment further, though in a rough-and-ready way, with various coloured solutions, the result satisfying me that he is certainly very blind for red and green. He has passed his "first," including chemistry, at Edinburgh. If there is any practical analytical work included in that examination, he must have been fortunate in not getting coloured solutions, nor needing to use flame-colour tests. I am, Sir, yours faithfully,

CHARLES H. PIESSE, M.R.C.S.,
Strand, W.C., March, 1886. Fellow of the Institute of Chemistry.

H. W. G.—Some account will be found in the "Book of Health," in an article by Dr. Herman Weber. Such experience as we have of individual phthisical patients has led us to think exceedingly well of the high tableland of the Darling Downs in Queensland. We believe that the opportunities for medical practice are not good; the population is very sparse, and the towns where practice is more promising are mostly situated on the coast, where the climate is much less suited to such cases.

An Earnest Enquirer.—We do not prescribe.

"PITYRIASIS CAPITIS."

To the Editor of THE LANCET.

SIR,—In reply to Dr. Caldwell's inquiry, in your issue of the 6th inst., p. 476, I beg to say that I have invariably found an application of equal parts of ung. hyd. rub. and vaseline most successful, attending to the general health, especially looking out for a gouty diathesis, avoiding brushing the head too frequently, and always using a fine comb or very soft hair-brush. I am, Sir, yours faithfully,

Leamington, March 8th, 1886. CHARLES MARRIOTT, M.D.

To the Editor of THE LANCET.

SIR,—I would advise Dr. Caldwell to try the following simple treatment:—Direct his patient to wash the head with soap-and-water to which has been added half a drachm to a drachm of sublimed sulphur. I think the best plan is to work the sulphur into a thin cream with the lather and wash thoroughly. If Dr. Caldwell will adopt this treatment I think he will be well satisfied with the result.

I am, Sir, yours truly,

Stony Stratford, March 9th, 1886. J. ANDERSON, L.S.A.

Enquirer (Surgeon) may use daily some hair wash, such as one compounded of liquor ammoniæ fort., ʒj.; ol. amygdal. dulc., ʒj; spiritus rosmarini, ʒiv.; and aqua mellis, ʒij. Or a lotion containing an ounce of tincture of cantharides to six ounces of water, and made agreeable by the addition of rosemary spirit. We should, however, advise our correspondent to take the first opportunity of consulting some authority, who no doubt would be very glad to give a brother advice.

Sigma.—The case might very well be accommodated in the infirmary or insane wards of a workhouse. It does not certainly appear to be one for an asylum.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Spender, Bath; Dr. Brookhouse, Nottingham; Mr. Stephen Paget, London; Dr. Saundby, Birmingham; Dr. Maunsell, Woolwich; Dr. Hughes Bennett, London; Mr. F. Treves,; Dr. Illingworth, Clyaton-le-Moors; Mr. Montague, London; Mr. Laffan, Cashel; Dr. Tremaine, New York; Mr. S. J. Samuel, London; Mr. Piesse, London; Mr. Johnson, Daventry; Mr. Mielziner, Ilkley; Mr. Macalister, Cambridge; Dr. W. Brodie, Detroit; Dr. Corazza, Verona; Dr. Kirk, Partick; Dr. Hale White, London; Mr. Llewellyn, Bargoed; Mr. Sinclair White, Sheffield; Messrs. Thornton and Son; Mr. Lermitte, Hounslow; Mr. I. Williams, London; Dr. Marriott, Leamington; Mr. C. B. Jennings, London; Mr. Harkness, Derby; Dr. Imlach, Liverpool; Mr. Hurry Fenwick, London; Mr. Elkerton, London; Mr. Abbott, Tunbridge Wells; Mr. H. A. Kinloch, London; Dr. Maule, London; Mr. Cory, Bournemouth; Mr. J. B. Benger, Manchester; Mr. A. W. M. Robson, Leeds; Dr. Thorburn, Manchester; Mr. Marder, Martock; Mr. V. Richards, Goalundo; Mr. Walter Weir, Norwood; Mr. Coveney, Sandhurst, Vic.; Mr. J. A. Kelly, Hyderabad; Dr. Roy; Messrs. Mackay, Edinburgh; Lieut.-Col. Montefiore; Mr. Ostell, Carlisle; Mr. Gurner, London; Mr. Fuge, Taunton; Mr. Gramshaw; Messrs. Loeflund and Co., London; Messrs. Lee and Martin, Birmingham; Messrs. Reed and Co., Bristol; Dr. Cambridge, Illinois, U.S.A.; Mr. James, Pontypridd; Mr. Rabone, Holloway; Dr. Harley, London; Mr. Fox, Birmingham; Mr. Laffan, Larnaca; Mr. Fry, Swansea; Mr. Anderson, Stony Stratford; Mr. S. G. Campbell, London; Mr. Marshall, Hawkhurst; Mr. Jelley, Totnes; Mr. Howarth, Bolton; Messrs. Goodall & Co., Leeds; Mr. Heron, Shipton-on-Stour; Mr. Huey; Miss Hatton, Langley Mill; Dr. Beverley, Norwich; Mr. Woodland; Mr. Arthur, London; Dr. Hadden, London; Dr. Huggard, Davos; An M.R.C.S. & L.S.A.L. of Thirty Years' Standing; H. K.; Z. B.; J. B., Shepherd's-bush; Lady Superintendent, St. Lawrence-on-Sea; Sigma; S. H. U.; M.R.C.C., Newmarket; D., Halesowen.

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